

공부로 이끄는 힘

완자 공부력

예비중등 수학 계산 7A

...
정답

1	소인수분해	2
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1 소인수분해

01

소수와 합성수 / 거듭제곱 / 소인수분해

12쪽

- | | |
|-----------------|------------------|
| ① 1, 2 / 소수 | ③ 1, 13 / 소수 |
| ② 1, 3, 9 / 합성수 | ④ 1, 5, 25 / 합성수 |

13쪽

- | | |
|--------------|------------------|
| ⑤ 17, 31, 53 | ⑩ 16, 32, 46 |
| ⑥ 5, 37 | ⑪ 4, 26, 30, 39 |
| ⑦ 19 | ⑫ 6, 36, 49, 60 |
| ⑧ 29, 41 | ⑬ 18, 42, 52 |
| ⑨ 7 | ⑭ 22, 33, 44, 55 |

14쪽

- | | |
|---------------------|-----------------|
| ⑮ 2, 5 | ⑱ 3 |
| ⑯ 100, 2 | ⑲ 7 |
| ⑰ $\frac{1}{2}$, 3 | ⑳ $\frac{1}{3}$ |
| | ㉑ 2, 3 |

15쪽

- | | |
|--------------------------------|--|
| ㉒ 3^2 | ㉘ $\frac{1}{11^4}$ |
| ㉓ 5^6 | ㉙ $3^3 \times 4^3$ |
| ㉔ 10^3 | ㉚ $2^2 \times 5^2 \times 7^3$ |
| ㉕ 13^4 | ㉛ $\left(\frac{1}{2}\right)^2 \times \left(\frac{1}{3}\right)^2$ |
| ㉖ $\left(\frac{1}{7}\right)^5$ | ㉜ $\left(\frac{1}{8}\right)^3 \times \left(\frac{3}{5}\right)^2$ |
| ㉗ $\left(\frac{2}{9}\right)^4$ | ㉝ $\frac{1}{6^2 \times 17^3}$ |

16쪽

- | | |
|--|--|
| ㉞ (위에서부터) 2, 2 / 2, 7 / $2^2 \times 7$ | ㉟ (위에서부터) 2, 2, 3 / 2, 3, 3 / $2^2 \times 3^2$ |
|--|--|

17쪽

- | | |
|-------------------------|---------------------------------------|
| ㉞ $2^3 / 2$ | ㊱ $2 \times 5^2 / 2, 5$ |
| ㉟ $2 \times 5 / 2, 5$ | ㊲ $2^3 \times 7 / 2, 7$ |
| ㊰ $3 \times 7 / 3, 7$ | ㊳ $2 \times 3 \times 11 / 2, 3, 11$ |
| ㊱ $2 \times 3^2 / 2, 3$ | ㊴ $2 \times 3^2 \times 13 / 2, 3, 13$ |
| ㊲ $2^3 \times 3 / 2, 3$ | ㊵ $2^3 \times 5 \times 7 / 2, 5, 7$ |

02

최대공약수 / 최소공배수

18쪽

- | | |
|-----|-----|
| ① ○ | ③ ○ |
| ② × | ④ × |

19쪽

① 최대공약수를 소인수의 곱으로 나타내어도 정답으로 인정합니다.

- | | |
|--------------|----------------------------|
| ⑤ 3^2 , 45 | ⑩ (위에서부터) 7, 7^2 , 7, 14 |
| ⑥ 8 | ⑪ 9 |
| ⑦ 12 | ⑫ 18 |
| ⑧ 84 | ⑬ 28 |
| ⑨ 35 | ⑭ 4 |

20쪽

① 최대공약수를 소인수의 곱으로 나타내어도 정답으로 인정합니다.

- | | |
|---------|---------------------------------|
| ⑮ 3, 12 | ㉓ (위에서부터) 2, 2^3 , 3, 2, 3, 6 |
| ⑯ 60 | ㉔ 4 |
| ⑰ 9 | ㉕ 15 |
| ⑱ 15 | ㉖ 4 |
| ㉑ 4 | ㉗ 9 |

21쪽

- | | |
|-----------------------|---|
| ㉘ 3^2 , 72 | ㉚ (위에서부터) 2^3 , 2^2 , 2^3 , 5, 40 |
| ㉙ 2^2 , 3^2 , 180 | ㉛ (위에서부터) 3^2 , 7, 3^2 , 7, 315 |

22쪽

29 3, 3

30 $2^2 \times 3^2 \times 11$

31 $3^3 \times 5^3 \times 13$

32 $2^4 \times 3^3 \times 5^2 \times 7$

33 $2^3 \times 3^3 \times 5^2 \times 7^2$

34 2, 7

35 $2^2 \times 3^3 \times 7$

36 $2^3 \times 3^3$

37 $2 \times 3 \times 5^2 \times 7$

38 $3^2 \times 5^3$

23쪽

39 2^4

40 $2^5 \times 5^2 \times 7$

41 $3^3 \times 5^3 \times 11^2$

42 $2^4 \times 3^4 \times 5^3$

43 $2^2 \times 3^4 \times 5^3 \times 11^2$

44 (위에서부터) $2^2, 2, 3,$

$3^2, 2^2, 3^2$

45 $2^4 \times 3^2$

46 $2^3 \times 3 \times 7^2$

47 $2^3 \times 3^3 \times 5^2$

48 $2^2 \times 5^2 \times 7 \times 11$

- 1 1과 10의 최대공약수는 1이므로 두 수는 서로소입니다.

참고 1은 모든 자연수와 서로소입니다.

- 2 4와 12의 최대공약수는 4이므로 두 수는 서로소가 아닙니다.

- 3 7과 13의 최대공약수는 1이므로 두 수는 서로소입니다.

참고 서로 다른 두 소수는 항상 서로소입니다.

- 4 30과 50의 최대공약수는 10이므로 두 수는 서로소가 아닙니다.

6
$$\frac{2^3}{2^5}$$

(최대공약수) = $2^3 = 8$

7
$$\frac{2^4 \times 3^2}{2^2 \times 3}$$

(최대공약수) = $2^2 \times 3 = 12$

8
$$\frac{2^2 \times 3 \times 7}{2^2 \times 3^2 \times 7^2}$$

(최대공약수) = $2^2 \times 3 \times 7 = 84$

9
$$\frac{2^3 \times 5^2 \times 7}{3^3 \times 5 \times 7^2}$$

(최대공약수) = $5 \times 7 = 35$

11
$$\frac{18 = 2 \times 3^2}{45 = 3^2 \times 5}$$

(최대공약수) = $3^2 = 9$

12
$$\frac{54 = 2 \times 3^3}{126 = 2 \times 3^2 \times 7}$$

(최대공약수) = $2 \times 3^2 = 18$

13
$$\frac{84 = 2^2 \times 3 \times 7}{112 = 2^4 \times 7}$$

(최대공약수) = $2^2 \times 7 = 28$

14
$$\frac{60 = 2^2 \times 3 \times 5}{124 = 2^2 \times 31}$$

(최대공약수) = $2^2 = 4$

16
$$\frac{2^3 \times 3^2 \times 5^4}{2^2 \times 3 \times 5^2}$$

(최대공약수) = $2^2 \times 3 \times 5 = 60$

17
$$\frac{2^3 \times 3^2 \times 7}{2^3 \times 3^4 \times 7}$$

(최대공약수) = $3^2 = 9$

18
$$\frac{2^2 \times 3^2 \times 5}{2^2 \times 3 \times 5^2 \times 7}$$

(최대공약수) = $3 \times 5 = 15$

19
$$\frac{2^4 \times 5^2}{2^2 \times 3^2 \times 5}$$

(최대공약수) = $2^2 = 4$

21
$$\frac{8 = 2^3}{12 = 2^2 \times 3}$$

(최대공약수) = $2^2 = 4$

22
$$\frac{15 = 3 \times 5}{75 = 3 \times 5^2}$$

(최대공약수) = $3 \times 5 = 15$

1 소인수분해

$$\begin{array}{rcl} 20 & = & 2^2 \times 5 \\ 28 & = & 2^2 \times 7 \\ 44 & = & 2^2 \times 11 \\ \hline (\text{최대공약수}) & = & 2^2 = 4 \end{array}$$

$$\begin{array}{rcl} 45 & = & 3^2 \times 5 \\ 54 & = & 2 \times 3^3 \\ 81 & = & 3^4 \\ \hline (\text{최대공약수}) & = & 3^2 = 9 \end{array}$$

$$\begin{array}{rcl} 2^3 \times 5 \\ 2^2 \times 5^3 \\ \hline (\text{최소공배수}) & = & 2^3 \times 5^3 \end{array}$$

$$\begin{array}{rcl} 2^2 \times 3 \\ 2^2 \times 3^2 \times 11 \\ \hline (\text{최소공배수}) & = & 2^2 \times 3^2 \times 11 \end{array}$$

$$\begin{array}{rcl} 3^3 \times 13 \\ 3^2 \times 5^3 \\ \hline (\text{최소공배수}) & = & 3^3 \times 5^3 \times 13 \end{array}$$

$$\begin{array}{rcl} 2 \times 3^3 \times 7 \\ 2^4 \times 3^2 \times 5^2 \\ \hline (\text{최소공배수}) & = & 2^4 \times 3^3 \times 5^2 \times 7 \end{array}$$

$$\begin{array}{rcl} 2^3 \times 5^2 \times 7 \\ 3^3 \times 5 \times 7^2 \\ \hline (\text{최소공배수}) & = & 2^3 \times 3^3 \times 5^2 \times 7^2 \end{array}$$

$$\begin{array}{rcl} 18 & = & 2 \times 3^2 \\ 42 & = & 2 \times 3 \times 7 \\ \hline (\text{최소공배수}) & = & 2 \times 3^2 \times 7 \end{array}$$

$$\begin{array}{rcl} 27 & = & 3^3 \\ 84 & = & 2^2 \times 3 \times 7 \\ \hline (\text{최소공배수}) & = & 2^2 \times 3^3 \times 7 \end{array}$$

$$\begin{array}{rcl} 54 & = & 2 \times 3^3 \\ 72 & = & 2^3 \times 3^2 \\ \hline (\text{최소공배수}) & = & 2^3 \times 3^3 \end{array}$$

$$\begin{array}{rcl} 35 & = & 5 \times 7 \\ 150 & = & 2 \times 3 \times 5^2 \\ \hline (\text{최소공배수}) & = & 2 \times 3 \times 5^2 \times 7 \end{array}$$

$$\begin{array}{rcl} 225 & = & 3^2 \times 5^2 \\ 375 & = & 3 \times 5^3 \\ \hline (\text{최소공배수}) & = & 3^2 \times 5^3 \end{array}$$

$$\begin{array}{rcl} 2^5 \\ 2^3 \times 5^2 \\ 2^4 \times 5 \times 7 \\ \hline (\text{최소공배수}) & = & 2^5 \times 5^2 \times 7 \end{array}$$

$$\begin{array}{rcl} 3^2 \times 5^2 \times 11 \\ 3^2 \times 5^3 \times 11^2 \\ 3^3 \times 5 \times 11^2 \\ \hline (\text{최소공배수}) & = & 3^3 \times 5^3 \times 11^2 \end{array}$$

$$\begin{array}{rcl} 2^3 \times 5^3 \\ 2^4 \times 3^2 \times 5^2 \\ 2 \times 3^4 \times 5^3 \\ \hline (\text{최소공배수}) & = & 2^4 \times 3^4 \times 5^3 \end{array}$$

$$\begin{array}{rcl} 2^2 \times 3^4 \times 5^2 \times 11 \\ 2 \times 3^3 \times 5^3 \times 11^2 \\ \hline (\text{최소공배수}) & = & 2^2 \times 3^4 \times 5^3 \times 11^2 \end{array}$$

$$\begin{array}{rcl} 12 & = & 2^2 \times 3 \\ 48 & = & 2^4 \times 3 \\ 72 & = & 2^3 \times 3^2 \\ \hline (\text{최소공배수}) & = & 2^4 \times 3^2 \end{array}$$

$$\begin{array}{rcl} 56 & = & 2^3 \times 7 \\ 84 & = & 2^2 \times 3 \times 7 \\ 98 & = & 2 \times 7^2 \\ \hline (\text{최소공배수}) & = & 2^3 \times 3 \times 7^2 \end{array}$$

$$\begin{array}{rcl} 24 & = & 2^3 \times 3 \\ 100 & = & 2^2 \times 5^2 \\ 135 & = & 3^3 \times 5 \\ \hline (\text{최소공배수}) & = & 2^3 \times 3^3 \times 5^2 \end{array}$$

$$\begin{array}{rcl} 28 & = & 2^2 \times 7 \\ 140 & = & 2^2 \times 5 \times 7 \\ 275 & = & 5^2 \times 11 \\ \hline (\text{최소공배수}) & = & 2^2 \times 5^2 \times 7 \times 11 \end{array}$$

24쪽

- | | |
|-------|--------------------|
| ① 합성수 | ⑥ 7, 4 |
| ② 소수 | ⑦ 3, 10 |
| ③ 합성수 | ⑧ 11, 5 |
| ④ 소수 | ⑨ $\frac{1}{4}, 4$ |
| ⑤ 합성수 | ⑩ $\frac{5}{3}, 3$ |

25쪽

- | | |
|--------------|---|
| ⑪ 2, 29, 47 | ⑮ 3^5 |
| ⑫ 3, 43, 53 | ⑯ 100^4 |
| ⑬ 11, 37 | ⑰ $\left(\frac{3}{4}\right)^3$ |
| ⑭ 27, 33, 51 | ⑱ $5^2 \times 11^4$ |
| ⑰ 9, 35, 69 | ⑲ $\frac{1}{2^2 \times 3^2 \times 5^2}$ |

26쪽

- | | |
|---------------------------------------|-----|
| ① $3^3 / 3$ | ⑮ ○ |
| ② $3^2 \times 5 / 3, 5$ | ⑯ × |
| ③ $2^3 \times 11 / 2, 11$ | ⑰ ○ |
| ④ $2^3 \times 3 \times 5 / 2, 3, 5$ | ⑱ × |
| ⑤ $2^2 \times 3^2 \times 7 / 2, 3, 7$ | ⑲ ○ |

27쪽 ① 최대공약수를 소인수의 곱으로 나타내어도 정답으로 인정합니다.

- | | |
|------|--|
| ① 4 | ⑮ 3^6 |
| ② 45 | ⑯ $2^2 \times 3^3 \times 11$ |
| ③ 2 | ⑰ $2^3 \times 3^5 \times 5^2 \times 7^2$ |
| ④ 26 | ⑱ $2 \times 3^2 \times 5$ |
| ⑤ 4 | ⑲ $2^3 \times 3^2 \times 5^2$ |

31
$$\frac{2^4}{2^2 \times 11} = 2^2 = 4$$

32
$$\frac{2 \times 3^2 \times 5^2}{3^3 \times 5} = 3^2 \times 5 = 45$$

33
$$\frac{2^2 \times 3^3 \times 5}{2 \times 3^3 \times 5^2 \times 7} = 2$$

34
$$\frac{52 = 2^2 \times 13}{78 = 2 \times 3 \times 13} = 2 \times 13 = 26$$

35
$$\frac{12 = 2^2 \times 3}{16 = 2^4}$$

$$\frac{28 = 2^2 \times 7}{(최대공약수) = 2^2} = 4$$

36
$$\frac{3^3}{3^6} = 3^6$$

37
$$\frac{2^2 \times 3^3 \times 11}{2 \times 3^2 \times 11} = 2^2 \times 3^3 \times 11$$

38
$$\frac{2^3 \times 3^2 \times 5^2 \times 7^2}{2^2 \times 3^5 \times 5 \times 3^3 \times 5^2 \times 7} = 2^3 \times 3^5 \times 5^2 \times 7^2$$

39
$$\frac{15 = 3 \times 5}{18 = 2 \times 3^2} = 2 \times 3^2 \times 5$$

40
$$\frac{40 = 2^3 \times 5}{50 = 2 \times 5^2}$$

$$\frac{72 = 2^3 \times 3^2}{(최소공배수) = 2^3 \times 3^2 \times 5^2}$$

2 정수와 유리수

4

양수와 음수 / 정수와 유리수 / 수직선

30쪽

- | | |
|----------|--------|
| ① -2000원 | ③ -2층 |
| ② +7℃ | ④ +20% |

31쪽

- | | |
|------------------|-----|
| ⑤ +1 | ⑪ 음 |
| ⑥ -6 | ⑫ 양 |
| ⑦ +1.4 | ⑬ 양 |
| ⑧ -3.9 | ⑭ 양 |
| ⑨ $+\frac{1}{2}$ | ⑮ 음 |
| ⑩ $-\frac{4}{3}$ | ⑯ 음 |

32쪽

- | | |
|---------------|--------------|
| ⑰ +4, +7 | ⑲ -7, -4, -9 |
| ⑱ +12, 2, +10 | ⑳ -8, -22 |

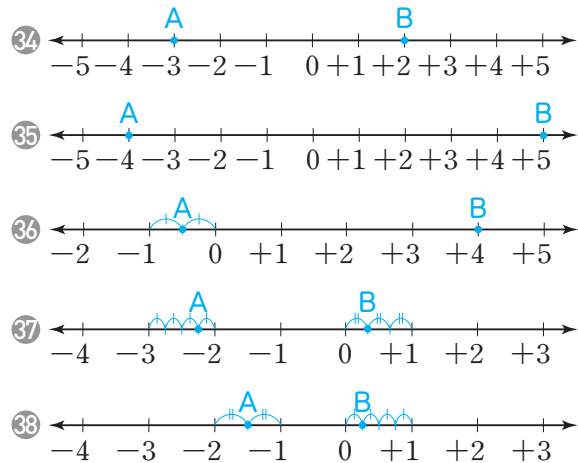
33쪽

- | | |
|--------------------------|---|
| ⑳ +2, +8 | ㉔ $4, +\frac{6}{2}$ |
| ㉑ -6 | ㉕ $4, +\frac{6}{2}$ |
| ㉒ +2, 0, +8, -6 | ㉖ $4, +\frac{6}{2}, 3.14, +0.1$ |
| ㉓ $+2, 2\frac{1}{3}, +8$ | ㉗ $4, -15, +\frac{6}{2}, 3.14,$
$-\frac{1}{5}, +0.1$ |
| ㉔ -1.7, -6 | ㉘ $3.14, -\frac{1}{5}, +0.1$ |

34쪽

- ㉙ -5, 0, +3
 ㉚ -1, +1, +6
 ㉛ $-\frac{5}{2}, -2, +\frac{2}{3}$

35쪽



5

절댓값 / 수의 대소 관계 / 부등호의 사용

36쪽

- | | |
|-------------|--------------------------------|
| ① $ +6 , 6$ | ④ $ +4.6 , 4.6$ |
| ② $ -7 , 7$ | ⑤ $ \frac{1}{2} , \frac{1}{2}$ |
| ③ $ 0 , 0$ | ⑥ $ \frac{6}{5} , \frac{6}{5}$ |

37쪽

- | | |
|--------------------------------|------------------|
| ⑦ -5, +5 / -5, +5 | ⑪ -2, +2 / +2 |
| ⑧ -1, +1 | ⑫ -4 |
| ⑨ $-\frac{3}{4}, +\frac{3}{4}$ | ⑬ $+\frac{9}{5}$ |
| ⑩ 0 | ⑭ -3.5 |

38쪽

- | | |
|-----|-----|
| ⑮ < | ⑱ < |
| ⑯ > | ⑲ > |
| ⑰ > | ⑳ < |

39쪽

21 >

22 <

23 <

24 >

25 >

26 <

27 $+1, 3 / -6, -2 /$

$-6, -2, +1, 3$

28 $-11, -10, +4, +8$

29 $-3, -\frac{1}{5}, 0, +\frac{1}{3},$

$+2$

30 $-\frac{37}{10}, -\frac{18}{5}, +2,$

$\frac{5}{2}, +3$

40쪽

31 $\geq$

32 <

33 $\leq$

34 <, $\leq$

35 $\leq, \leq$

36 $\leq, <$

41쪽

37 $a > -10$

38 $a \leq 3$

39 $a \leq -8$

40 $a > -\frac{1}{5}$

41 $a \geq 9$

42 $1 < a < 2$

43 $-4 \leq a \leq 1$

44 $-1 < a < 15$

45 $0 \leq a \leq \frac{5}{6}$

46 $1.8 \leq a \leq 2.3$

20 $|-7| = 7 \Rightarrow -4 < 7 \Rightarrow -4 < |-7|$

22 $+\frac{4}{3} = +\frac{8}{6}, +\frac{3}{2} = +\frac{9}{6}$

$\Rightarrow +\frac{4}{3} < +\frac{3}{2}$

23 $+\frac{10}{7} = +\frac{50}{35}, +1.6 = +\frac{8}{5} = +\frac{56}{35}$

$\Rightarrow +\frac{10}{7} < +1.6$

25 $-\frac{11}{6} = -\frac{44}{24}, -\frac{15}{8} = -\frac{45}{24}$

$\Rightarrow -\frac{11}{6} > -\frac{15}{8}$

26 $-\frac{5}{2} = -\frac{25}{10}, -2.4 = -\frac{24}{10}$

$\Rightarrow -\frac{5}{2} < -2.4$

28 양수끼리 크기를 비교하면 $+4 < +8$

음수끼리 크기를 비교하면 $-11 < -10$

따라서 수를 작은 것부터 차례대로 쓰면

$-11, -10, +4, +8$ 입니다.

29 양수끼리 크기를 비교하면 $+\frac{1}{3} < +2$

음수끼리 크기를 비교하면 $-3 < -\frac{1}{5}$

따라서 수를 작은 것부터 차례대로 쓰면

$-3, -\frac{1}{5}, 0, +\frac{1}{3}, +2$ 입니다.

30 양수끼리 크기를 비교하면 $+2 < \frac{5}{2} < +3$

$-\frac{18}{5} = -\frac{36}{10}$ 이므로 음수끼리 크기를 비교하면

$-\frac{37}{10} < -\frac{18}{5}$

따라서 수를 작은 것부터 차례대로 쓰면

$-\frac{37}{10}, -\frac{18}{5}, +2, \frac{5}{2}, +3$ 입니다.

6

정수와 유리수 평가

42쪽

① $+2$ 일

② -800 m

③ $+7$

④ $-1\frac{2}{5}$

⑤ $+1, +3$

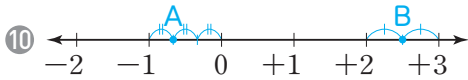
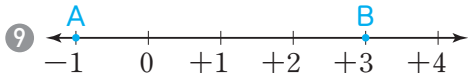
⑥ $4, +2, 13$

⑦ $-2, +1$

⑧ $-\frac{7}{3}, +\frac{1}{2}$

2 정수와 유리수

43쪽



11 9

12 1.2

13 -5, -12

14 $\frac{8}{4}$, -5, 0, +9, -12

15 $\frac{8}{4}$, +0.25, +9

16 +0.25, $-\frac{3}{4}$

44쪽

17 -3, +3

18 -4.7, +4.7

19 $-\frac{1}{8}$, $+\frac{1}{8}$

20 +5

21 -0.2

22 <

23 <

24 >

25 <

26 >

45쪽

27 +9, 3, 0, -7

28 4, 2.6, 1, -1, -2.6

29 -4.1, -1, 5, +5.8

30 $-\frac{8}{3}$, -2, $-\frac{9}{5}$,

3, +3.5

31 $a \leq 3$

32 $a \geq -\frac{1}{2}$

33 $4 < a < 7$

34 $\frac{4}{9} \leq a < \frac{2}{3}$

35 $1.7 \leq a \leq 6.9$

24 $|\frac{4}{3}| = \frac{4}{3} \Rightarrow |\frac{4}{3}| > +1$

25 $+\frac{3}{2} = +\frac{27}{18}$, $+\frac{14}{9} = +\frac{28}{18}$

$\Rightarrow +\frac{3}{2} < +\frac{14}{9}$

26 $-\frac{7}{5} = -\frac{14}{10}$, $-1.5 = -\frac{15}{10}$

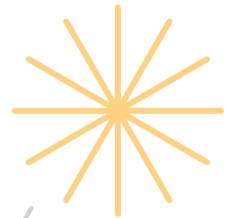
$\Rightarrow -\frac{7}{5} > -1.5$

27 양수끼리 크기를 비교하면 $+9 > 3$
따라서 수를 큰 것부터 차례대로 쓰면
+9, 3, 0, -7입니다.

28 양수끼리 크기를 비교하면 $4 > 2.6 > 1$
음수끼리 크기를 비교하면 $-1 > -2.6$
따라서 수를 큰 것부터 차례대로 쓰면
4, 2.6, 1, -1, -2.6입니다.

29 양수끼리 크기를 비교하면 $5 < +5.8$
음수끼리 크기를 비교하면 $-4.1 < -1$
따라서 수를 작은 것부터 차례대로 쓰면
-4.1, -1, 5, +5.8입니다.

30 양수끼리 크기를 비교하면 $3 < +3.5$
 $-\frac{8}{3} = -2\frac{2}{3}$, $-\frac{9}{5} = -1\frac{4}{5}$ 이므로
음수끼리 크기를 비교하면 $-\frac{8}{3} < -2 < -\frac{9}{5}$
따라서 수를 작은 것부터 차례대로 쓰면
 $-\frac{8}{3}$, -2, $-\frac{9}{5}$, 3, +3.5입니다.



3 정수와 유리수의 덧셈과 뺄셈

07

부호가 같은 두 수의 덧셈

48쪽

① $+7$

② $-4 / -6$

49쪽

③ $+, +, 6$

⑨ $+9$

④ $+2$

⑩ $+10$

⑤ $+8$

⑪ $+13$

⑥ $+5$

⑫ $+16$

⑦ $+7$

⑬ $+24$

⑧ $+6$

⑭ $+26$

50쪽

⑮ $-, -, 9$

⑳ -9

⑯ -3

㉑ -12

⑰ -8

㉒ -12

⑱ -7

㉓ -15

㉔ -10

㉕ -16

㉖ -9

㉗ -29

51쪽 ① 계산 결과를 가분수 또는 기약분수로 나타내지 않아도 정답으로 인정합니다.

㉘ $+, +, \frac{5}{3}$

㉙ $-, -, 2, -, \frac{3}{2}$

㉚ $+4$

㉛ $+\frac{11}{5}$

㉜ $+\frac{2}{3}$

㉝ $+\frac{23}{6}$

㉞ $-\frac{4}{5}$

㉟ $-\frac{13}{3}$

㊱ -3

㊲ $-\frac{15}{2}$

52쪽 ① 계산 결과를 가분수 또는 기약분수로 나타내지 않아도 정답으로 인정합니다.

㊳ $-, -, 5, 4, -, \frac{9}{20}$

㊴ $+, +, 3.6$

㊵ $+\frac{7}{8}$

㊶ $+1.8$

㊷ $+\frac{8}{15}$

㊸ $+4.4$

㊹ $-\frac{17}{12}$

㊺ -7.7

㊻ $-\frac{47}{18}$

㊼ -5.2

㊽ -1.8

53쪽 ① 계산 결과를 가분수 또는 기약분수로 나타내지 않아도 정답으로 인정합니다.

㊾ $+1.1$

㊿ $+, +, 5, +, 15,$

㋀ $+2.1$

$+, \frac{10}{3}$

㋁ -4.3

㋂ $+\frac{8}{5}$

㋃ -9

㋄ $+\frac{24}{5}$

㋅ $+1.3$

㋆ $-\frac{53}{10}$

㋇ -5.04

㋈ $-\frac{26}{15}$

㋉ $(+1)+(+1)=+(1+1)=+2$

㋊ $(+7)+(+1)=+(7+1)=+8$

㋋ $(+3)+(+2)=+(3+2)=+5$

㋌ $(+2)+(+5)=+(2+5)=+7$

㋍ $(+3)+(+3)=+(3+3)=+6$

㋎ $(+6)+(+3)=+(6+3)=+9$

㋏ $(+4)+(+6)=+(4+6)=+10$

㋐ $(+5)+(+8)=+(5+8)=+13$

㋑ $(+9)+(+7)=+(9+7)=+16$

㋒ $(+16)+(+8)=+(16+8)=+24$

㋓ $(+11)+(+15)=+(11+15)=+26$

3 정수와 유리수의 덧셈과 뺄셈

$$\textcircled{16} (-2) + (-1) = -(2+1) = -3$$

$$\textcircled{17} (-1) + (-7) = -(1+7) = -8$$

$$\textcircled{18} (-3) + (-4) = -(3+4) = -7$$

$$\textcircled{19} (-5) + (-5) = -(5+5) = -10$$

$$\textcircled{20} (-2) + (-7) = -(2+7) = -9$$

$$\textcircled{21} (-6) + (-3) = -(6+3) = -9$$

$$\textcircled{22} (-8) + (-4) = -(8+4) = -12$$

$$\textcircled{23} (-7) + (-5) = -(7+5) = -12$$

$$\textcircled{24} (-9) + (-6) = -(9+6) = -15$$

$$\textcircled{25} (-13) + (-3) = -(13+3) = -16$$

$$\textcircled{26} (-12) + (-17) = -(12+17) = -29$$

$$\begin{aligned} \textcircled{28} \left(+\frac{1}{2}\right) + \left(+\frac{7}{2}\right) &= +\left(\frac{1}{2} + \frac{7}{2}\right) \\ &= +\frac{8}{2} = +4 \end{aligned}$$

$$\begin{aligned} \textcircled{29} \left(+\frac{4}{9}\right) + \left(+\frac{2}{9}\right) &= +\left(\frac{4}{9} + \frac{2}{9}\right) \\ &= +\frac{6}{9} = +\frac{2}{3} \end{aligned}$$

$$\textcircled{30} \left(-\frac{3}{5}\right) + \left(-\frac{1}{5}\right) = -\left(\frac{3}{5} + \frac{1}{5}\right) = -\frac{4}{5}$$

$$\begin{aligned} \textcircled{31} \left(-\frac{9}{4}\right) + \left(-\frac{3}{4}\right) &= -\left(\frac{9}{4} + \frac{3}{4}\right) \\ &= -\frac{12}{4} = -3 \end{aligned}$$

$$\begin{aligned} \textcircled{33} (+2) + \left(+\frac{1}{5}\right) &= +\left(2 + \frac{1}{5}\right) \\ &= +\left(\frac{10}{5} + \frac{1}{5}\right) \\ &= +\frac{11}{5} \end{aligned}$$

$$\begin{aligned} \textcircled{34} \left(+\frac{5}{6}\right) + (+3) &= +\left(\frac{5}{6} + 3\right) \\ &= +\left(\frac{5}{6} + \frac{18}{6}\right) \\ &= +\frac{23}{6} \end{aligned}$$

$$\begin{aligned} \textcircled{35} (-4) + \left(-\frac{1}{3}\right) &= -\left(4 + \frac{1}{3}\right) \\ &= -\left(\frac{12}{3} + \frac{1}{3}\right) \\ &= -\frac{13}{3} \end{aligned}$$

$$\begin{aligned} \textcircled{36} \left(-\frac{3}{2}\right) + (-6) &= -\left(\frac{3}{2} + 6\right) \\ &= -\left(\frac{3}{2} + \frac{12}{2}\right) \\ &= -\frac{15}{2} \end{aligned}$$

$$\begin{aligned} \textcircled{38} \left(+\frac{3}{8}\right) + \left(+\frac{1}{2}\right) &= +\left(\frac{3}{8} + \frac{1}{2}\right) \\ &= +\left(\frac{3}{8} + \frac{4}{8}\right) \\ &= +\frac{7}{8} \end{aligned}$$

$$\begin{aligned} \textcircled{39} \left(+\frac{1}{5}\right) + \left(+\frac{1}{3}\right) &= +\left(\frac{1}{5} + \frac{1}{3}\right) \\ &= +\left(\frac{3}{15} + \frac{5}{15}\right) \\ &= +\frac{8}{15} \end{aligned}$$

$$\begin{aligned} \textcircled{40} \left(-\frac{2}{3}\right) + \left(-\frac{3}{4}\right) &= -\left(\frac{2}{3} + \frac{3}{4}\right) \\ &= -\left(\frac{8}{12} + \frac{9}{12}\right) \\ &= -\frac{17}{12} \end{aligned}$$

$$\begin{aligned} \textcircled{41} \left(-\frac{5}{2}\right) + \left(-\frac{1}{9}\right) &= -\left(\frac{5}{2} + \frac{1}{9}\right) \\ &= -\left(\frac{45}{18} + \frac{2}{18}\right) \\ &= -\frac{47}{18} \end{aligned}$$

$$\textcircled{43} (+0.8) + (+1) = +(0.8+1) = +1.8$$

$$\textcircled{44} (+3) + (+1.4) = +(3+1.4) = +4.4$$

$$\textcircled{45} (-5) + (-2.7) = -(5+2.7) = -7.7$$

$$\textcircled{46} (-1.2) + (-4) = -(1.2+4) = -5.2$$

$$\textcircled{47} 0 + (-1.8) = -1.8$$

$$\textcircled{48} (+0.7) + (+0.4) = +(0.7+0.4) = +1.1$$

$$\textcircled{49} (+1.5) + (+0.6) = +(1.5+0.6) = +2.1$$

$$\textcircled{50} (-3.2) + (-1.1) = -(3.2+1.1) = -4.3$$

$$\textcircled{51} (-6.3) + (-2.7) = -(6.3+2.7) = -9$$

$$\textcircled{52} (+1.25) + (+0.05) = +(1.25+0.05) = +1.3$$

$$\textcircled{53} (-3.14) + (-1.9) = -(3.14+1.9) = -5.04$$

$$\begin{aligned}\textcircled{55} (+0.7) + \left(+\frac{9}{10}\right) &= +\left(0.7 + \frac{9}{10}\right) \\ &= +\left(\frac{7}{10} + \frac{9}{10}\right) \\ &= +\frac{16}{10} = +\frac{8}{5}\end{aligned}$$

$$\begin{aligned}\textcircled{56} (+3.3) + \left(+\frac{3}{2}\right) &= +\left(3.3 + \frac{3}{2}\right) \\ &= +\left(\frac{33}{10} + \frac{3}{2}\right) \\ &= +\left(\frac{33}{10} + \frac{15}{10}\right) \\ &= +\frac{48}{10} = +\frac{24}{5}\end{aligned}$$

$$\begin{aligned}\textcircled{57} \left(-\frac{1}{5}\right) + (-5.1) &= -\left(\frac{1}{5} + 5.1\right) \\ &= -\left(\frac{1}{5} + \frac{51}{10}\right) \\ &= -\left(\frac{2}{10} + \frac{51}{10}\right) \\ &= -\frac{53}{10}\end{aligned}$$

$$\begin{aligned}\textcircled{58} (-1.4) + \left(-\frac{1}{3}\right) &= -\left(1.4 + \frac{1}{3}\right) \\ &= -\left(\frac{7}{5} + \frac{1}{3}\right) \\ &= -\left(\frac{21}{15} + \frac{5}{15}\right) \\ &= -\frac{26}{15}\end{aligned}$$

8

부호가 다른 두 수의 덧셈

54쪽

$$\textcircled{1} -1$$

$$\textcircled{2} -2 / +3$$

$$\textcircled{3} +3$$

$$\textcircled{4} -6 / -4$$

55쪽

$$\textcircled{5} -, -, 4$$

$$\textcircled{6} +4$$

$$\textcircled{7} +3$$

$$\textcircled{8} -4$$

$$\textcircled{9} -7$$

$$\textcircled{10} +1$$

$$\textcircled{11} +6$$

$$\textcircled{12} +1$$

$$\textcircled{13} -1$$

$$\textcircled{14} 0$$

$$\textcircled{15} +5$$

$$\textcircled{16} -2$$

56쪽

$$\textcircled{17} +6$$

$$\textcircled{18} -1$$

$$\textcircled{19} +3$$

$$\textcircled{20} -3$$

$$\textcircled{21} +1$$

$$\textcircled{22} +5$$

$$\textcircled{23} -3$$

$$\textcircled{24} -2$$

$$\textcircled{25} +5$$

$$\textcircled{26} 0$$

$$\textcircled{27} -8$$

$$\textcircled{28} -7$$

57쪽 ① 계산 결과를 가분수 또는 기약분수로 나타내지 않아도 정답으로 인정합니다.

$$\textcircled{29} -, 5, -, \frac{2}{7}$$

$$\textcircled{30} +\frac{1}{2}$$

$$\textcircled{31} -\frac{5}{3}$$

$$\textcircled{32} -2$$

$$\textcircled{33} -\frac{3}{11}$$

$$\textcircled{34} 3, -, 3, -, \frac{2}{3}$$

$$\textcircled{35} +\frac{3}{2}$$

$$\textcircled{36} -\frac{14}{5}$$

$$\textcircled{37} +\frac{11}{6}$$

$$\textcircled{38} -\frac{1}{4}$$

3 정수와 유리수의 덧셈과 뺄셈

58쪽 ① 계산 결과를 가분수 또는 기약분수로 나타내지 않아도 정답으로 인정합니다.

39 $2, 9, +, 9, 2, +, \frac{7}{18}$

40 $-\frac{1}{3}$

41 $+\frac{23}{21}$

42 $+\frac{1}{4}$

43 $-\frac{7}{24}$

44 $-, 1, -, 1.3$

45 $+2.4$

46 $+2.3$

47 -1.8

48 $+3.2$

49 $+0.36$

59쪽 ① 계산 결과를 가분수 또는 기약분수로 나타내지 않아도 정답으로 인정합니다.

50 -0.4

51 $+0.6$

52 -1.1

53 $+0.2$

54 -1.8

55 -2.9

56 $2, 6, 5, +, 6, 5,$

$+, \frac{1}{15}$

57 $+\frac{7}{10}$

58 $-\frac{1}{20}$

59 $-\frac{2}{5}$

60 $-\frac{9}{40}$

6 $(+6)+(-2)=+(6-2)=+4$

7 $(+4)+(-1)=+(4-1)=+3$

8 $(+3)+(-7)=- (7-3)=-4$

9 $(+2)+(-9)=- (9-2)=-7$

10 $(+5)+(-4)=+(5-4)=+1$

11 $(+9)+(-3)=+(9-3)=+6$

12 $(+7)+(-6)=+(7-6)=+1$

13 $(+8)+(-9)=- (9-8)=-1$

14 $(+4)+(-4)=0$

15 $(+12)+(-7)=+(12-7)=+5$

16 $(+11)+(-13)=- (13-11)=-2$

17 $(-1)+(+7)=+(7-1)=+6$

18 $(-5)+(+4)=- (5-4)=-1$

19 $(-2)+(+5)=+(5-2)=+3$

20 $(-9)+(+6)=- (9-6)=-3$

21 $(-7)+(+8)=+(8-7)=+1$

22 $(-4)+(+9)=+(9-4)=+5$

23 $(-8)+(+5)=- (8-5)=-3$

24 $(-6)+(+4)=- (6-4)=-2$

25 $(-3)+(+8)=+(8-3)=+5$

26 $(-5)+(+5)=0$

27 $(-15)+(+7)=- (15-7)=-8$

28 $(-21)+(+14)=- (21-14)=-7$

30 $(+\frac{3}{4})+(-\frac{1}{4})=+(\frac{3}{4}-\frac{1}{4})$
 $=+\frac{2}{4}=+\frac{1}{2}$

31 $(+\frac{2}{3})+(-\frac{7}{3})=- (\frac{7}{3}-\frac{2}{3})=-\frac{5}{3}$

32 $(-\frac{5}{2})+(+\frac{1}{2})=- (\frac{5}{2}-\frac{1}{2})$
 $=-\frac{4}{2}=-2$

33 $(-\frac{7}{11})+(+\frac{4}{11})=- (\frac{7}{11}-\frac{4}{11})=-\frac{3}{11}$

35 $(+3)+(-\frac{3}{2})=(+\frac{6}{2})+(-\frac{3}{2})$
 $=+(\frac{6}{2}-\frac{3}{2})$
 $=+\frac{3}{2}$

$$\begin{aligned} 36 \quad \left(+\frac{6}{5}\right) + (-4) &= \left(+\frac{6}{5}\right) + \left(-\frac{20}{5}\right) \\ &= -\left(\frac{20}{5} - \frac{6}{5}\right) \\ &= -\frac{14}{5} \end{aligned}$$

$$\begin{aligned} 37 \quad \left(-\frac{1}{6}\right) + (+2) &= \left(-\frac{1}{6}\right) + \left(+\frac{12}{6}\right) \\ &= +\left(\frac{12}{6} - \frac{1}{6}\right) \\ &= +\frac{11}{6} \end{aligned}$$

$$\begin{aligned} 38 \quad (-5) + \left(+\frac{19}{4}\right) &= \left(-\frac{20}{4}\right) + \left(+\frac{19}{4}\right) \\ &= -\left(\frac{20}{4} - \frac{19}{4}\right) \\ &= -\frac{1}{4} \end{aligned}$$

$$\begin{aligned} 40 \quad \left(+\frac{1}{6}\right) + \left(-\frac{1}{2}\right) &= \left(+\frac{1}{6}\right) + \left(-\frac{3}{6}\right) \\ &= -\left(\frac{3}{6} - \frac{1}{6}\right) \\ &= -\frac{2}{6} = -\frac{1}{3} \end{aligned}$$

$$\begin{aligned} 41 \quad \left(+\frac{5}{3}\right) + \left(-\frac{4}{7}\right) &= \left(+\frac{35}{21}\right) + \left(-\frac{12}{21}\right) \\ &= +\left(\frac{35}{21} - \frac{12}{21}\right) \\ &= +\frac{23}{21} \end{aligned}$$

$$\begin{aligned} 42 \quad \left(-\frac{2}{3}\right) + \left(+\frac{11}{12}\right) &= \left(-\frac{8}{12}\right) + \left(+\frac{11}{12}\right) \\ &= +\left(\frac{11}{12} - \frac{8}{12}\right) \\ &= +\frac{3}{12} = +\frac{1}{4} \end{aligned}$$

$$\begin{aligned} 43 \quad \left(-\frac{13}{6}\right) + \left(+\frac{15}{8}\right) &= \left(-\frac{52}{24}\right) + \left(+\frac{45}{24}\right) \\ &= -\left(\frac{52}{24} - \frac{45}{24}\right) \\ &= -\frac{7}{24} \end{aligned}$$

$$45 \quad (+5.4) + (-3) = +(5.4-3) = +2.4$$

$$46 \quad (+4) + (-1.7) = +(4-1.7) = +2.3$$

$$47 \quad (-3.8) + (+2) = -(3.8-2) = -1.8$$

$$48 \quad (-6) + (+9.2) = +(9.2-6) = +3.2$$

$$49 \quad (-2.64) + (+3) = +(3-2.64) = +0.36$$

$$50 \quad (+0.2) + (-0.6) = -(0.6-0.2) = -0.4$$

$$51 \quad (+0.9) + (-0.3) = +(0.9-0.3) = +0.6$$

$$52 \quad (+1.4) + (-2.5) = -(2.5-1.4) = -1.1$$

$$53 \quad (-0.5) + (+0.7) = +(0.7-0.5) = +0.2$$

$$54 \quad (-2.1) + (+0.3) = -(2.1-0.3) = -1.8$$

$$55 \quad (-9.8) + (+6.9) = -(9.8-6.9) = -2.9$$

$$\begin{aligned} 57 \quad \left(+\frac{9}{10}\right) + (-0.2) &= \left(+\frac{9}{10}\right) + \left(-\frac{2}{10}\right) \\ &= +\left(\frac{9}{10} - \frac{2}{10}\right) \\ &= +\frac{7}{10} \end{aligned}$$

$$\begin{aligned} 58 \quad (+1.2) + \left(-\frac{5}{4}\right) &= \left(+\frac{6}{5}\right) + \left(-\frac{5}{4}\right) \\ &= \left(+\frac{24}{20}\right) + \left(-\frac{25}{20}\right) \\ &= -\left(\frac{25}{20} - \frac{24}{20}\right) \\ &= -\frac{1}{20} \end{aligned}$$

$$\begin{aligned} 59 \quad \left(-\frac{7}{10}\right) + (+0.3) &= \left(-\frac{7}{10}\right) + \left(+\frac{3}{10}\right) \\ &= -\left(\frac{7}{10} - \frac{3}{10}\right) \\ &= -\frac{4}{10} = -\frac{2}{5} \end{aligned}$$

$$\begin{aligned} 60 \quad (-1.6) + \left(+\frac{11}{8}\right) &= \left(-\frac{8}{5}\right) + \left(+\frac{11}{8}\right) \\ &= \left(-\frac{64}{40}\right) + \left(+\frac{55}{40}\right) \\ &= -\left(\frac{64}{40} - \frac{55}{40}\right) \\ &= -\frac{9}{40} \end{aligned}$$

3 정수와 유리수의 덧셈과 뺄셈

09

덧셈의 계산 법칙

60쪽 ① 계산 결과를 가분수 또는 기약분수로 나타내지 않아도 정답으로 인정합니다.

① $+7 / +7$

② $+3 / +3$

③ $-\frac{13}{15} / -\frac{13}{15}$

④ $-0.8 / -0.8$

61쪽 ① 계산 결과를 가분수 또는 기약분수로 나타내지 않아도 정답으로 인정합니다.

⑤ $+2, +2, +10, +4$
/ 교환, 결합

⑥ $-3, -3, -5, 0$
/ 덧셈의 교환법칙,
덧셈의 결합법칙

⑦ $-\frac{4}{3}, -\frac{4}{3},$

$-\frac{5}{3}, -\frac{13}{6}$

/ 덧셈의 교환법칙,
덧셈의 결합법칙

⑧ $+1.5, +1.5,$
 $+5, +3.3$
/ 덧셈의 교환법칙,
덧셈의 결합법칙

62쪽

⑨ 0

⑩ -5

⑪ +7

⑫ 0

⑬ 0

⑭ +14

⑮ -16

⑯ +25

⑰ -23

⑱ +2

⑲ +9

⑳ -15

63쪽 ① 계산 결과를 가분수 또는 기약분수로 나타내지 않아도 정답으로 인정합니다.

⑲ $-\frac{5}{2}$

⑳ $+\frac{2}{3}$

㉑ 0

㉒ -2

㉓ +6

㉔ +1.8

㉕ +2.5

㉖ +5.8

㉗ -5

㉘ +1

㉙ +20

64쪽 ① 계산 결과를 가분수 또는 기약분수로 나타내지 않아도 정답으로 인정합니다.

㉚ $-\frac{1}{3}$

㉛ $-\frac{4}{5}$

㉜ $+\frac{4}{3}$

㉝ +2

㉞ 0

㉟ $-\frac{1}{4}$

㊱ $-\frac{23}{7}$

㊲ $+\frac{38}{15}$

㊳ $+\frac{1}{10}$

㊴ $-\frac{1}{12}$

65쪽

㊵ +0.4

㊶ -1.1

㊷ +2.2

㊸ -0.9

㊹ +0.1

㊺ +1.6

㊻ -3

㊼ -2.5

㊽ -1.6

㊾ +7.2

㊿ +0.3

㋀ +1.4

① $(+4) + (+3) = +(4+3) = +7$
덧셈의 교환법칙에 의하여
 $(+3) + (+4) = (+4) + (+3) = +7$

② $(-2) + (+5) = +(5-2) = +3$
덧셈의 교환법칙에 의하여
 $(+5) + (-2) = (-2) + (+5) = +3$

③ $(-\frac{1}{5}) + (-\frac{2}{3}) = -(\frac{1}{5} + \frac{2}{3})$
 $= -(\frac{3}{15} + \frac{10}{15})$
 $= -\frac{13}{15}$
덧셈의 교환법칙에 의하여
 $(-\frac{2}{3}) + (-\frac{1}{5}) = (-\frac{1}{5}) + (-\frac{2}{3}) = -\frac{13}{15}$

④ $(+0.7) + (-1.5) = -(1.5-0.7) = -0.8$
덧셈의 교환법칙에 의하여
 $(-1.5) + (+0.7) = (+0.7) + (-1.5) = -0.8$

$$\begin{aligned}
 9 \quad (+1)+(-4)+(+3) &= (+1)+(+3)+(-4) \\
 &= \{(+1)+(+3)\}+(-4) \\
 &= (+4)+(-4) \\
 &= 0
 \end{aligned}$$

$$\begin{aligned}
 10 \quad (-2)+(+5)+(-8) &= (-2)+(-8)+(+5) \\
 &= \{(-2)+(-8)\}+(+5) \\
 &= (-10)+(+5) \\
 &= -5
 \end{aligned}$$

$$\begin{aligned}
 11 \quad (+4)+(-3)+(+6) &= (+4)+(+6)+(-3) \\
 &= \{(+4)+(+6)\}+(-3) \\
 &= (+10)+(-3) \\
 &= +7
 \end{aligned}$$

$$\begin{aligned}
 12 \quad (+3)+(-6)+(+3) &= (+3)+(+3)+(-6) \\
 &= \{(+3)+(+3)\}+(-6) \\
 &= (+6)+(-6) \\
 &= 0
 \end{aligned}$$

$$\begin{aligned}
 13 \quad (-7)+(+13)+(-6) &= (-7)+(-6)+(+13) \\
 &= \{(-7)+(-6)\}+(+13) \\
 &= (-13)+(+13) \\
 &= 0
 \end{aligned}$$

$$\begin{aligned}
 14 \quad (+9)+(-6)+(+11) &= (+9)+(+11)+(-6) \\
 &= \{(+9)+(+11)\}+(-6) \\
 &= (+20)+(-6) \\
 &= +14
 \end{aligned}$$

$$\begin{aligned}
 15 \quad (-12)+(+4)+(-8) &= (-12)+(-8)+(+4) \\
 &= \{(-12)+(-8)\}+(+4) \\
 &= (-20)+(+4) \\
 &= -16
 \end{aligned}$$

$$\begin{aligned}
 16 \quad (+23)+(-5)+(+7) &= (+23)+(+7)+(-5) \\
 &= \{(+23)+(+7)\}+(-5) \\
 &= (+30)+(-5) \\
 &= +25
 \end{aligned}$$

$$\begin{aligned}
 17 \quad (-6)+(+17)+(-34) &= (-6)+(-34)+(+17) \\
 &= \{(-6)+(-34)\}+(+17) \\
 &= (-40)+(+17) \\
 &= -23
 \end{aligned}$$

$$\begin{aligned}
 18 \quad (-5)+(+2)+(+5) &= (-5)+(+5)+(+2) \\
 &= \{(-5)+(+5)\}+(+2) \\
 &= 0+(+2) \\
 &= +2
 \end{aligned}$$

$$\begin{aligned}
 19 \quad (+7)+(+9)+(-7) &= (+7)+(-7)+(+9) \\
 &= \{(+7)+(-7)\}+(+9) \\
 &= 0+(+9) \\
 &= +9
 \end{aligned}$$

$$\begin{aligned}
 20 \quad (-8)+(-15)+(+8) &= (-8)+(+8)+(-15) \\
 &= \{(-8)+(+8)\}+(-15) \\
 &= 0+(-15) \\
 &= -15
 \end{aligned}$$

$$\begin{aligned}
 21 \quad (-1)+\left(+\frac{1}{2}\right)+(-2) &= (-1)+(-2)+\left(+\frac{1}{2}\right) \\
 &= \{(-1)+(-2)\}+\left(+\frac{1}{2}\right) \\
 &= (-3)+\left(+\frac{1}{2}\right) \\
 &= \left(-\frac{6}{2}\right)+\left(+\frac{1}{2}\right) \\
 &= -\frac{5}{2}
 \end{aligned}$$

$$\begin{aligned}
 22 \quad (+3)+\left(-\frac{4}{3}\right)+(-1) &= (+3)+(-1)+\left(-\frac{4}{3}\right) \\
 &= \{(+3)+(-1)\}+\left(-\frac{4}{3}\right) \\
 &= (+2)+\left(-\frac{4}{3}\right) \\
 &= \left(+\frac{6}{3}\right)+\left(-\frac{4}{3}\right) \\
 &= +\frac{2}{3}
 \end{aligned}$$

$$\begin{aligned}
 23 \quad \left(-\frac{3}{4}\right)+(+1)+\left(-\frac{1}{4}\right) &= \left(-\frac{3}{4}\right)+\left(-\frac{1}{4}\right)+(+1) \\
 &= \left\{\left(-\frac{3}{4}\right)+\left(-\frac{1}{4}\right)\right\}+(+1) \\
 &= (-1)+(+1) \\
 &= 0
 \end{aligned}$$

3 정수와 유리수의 덧셈과 뺄셈

$$\begin{aligned}
 24 \quad & \left(+\frac{5}{7}\right) + (-2) + \left(-\frac{5}{7}\right) \\
 &= \left(+\frac{5}{7}\right) + \left(-\frac{5}{7}\right) + (-2) \\
 &= \left\{\left(+\frac{5}{7}\right) + \left(-\frac{5}{7}\right)\right\} + (-2) \\
 &= 0 + (-2) \\
 &= -2
 \end{aligned}$$

$$\begin{aligned}
 25 \quad & \left(+\frac{2}{3}\right) + (+5) + \left(+\frac{1}{3}\right) \\
 &= \left(+\frac{2}{3}\right) + \left(+\frac{1}{3}\right) + (+5) \\
 &= \left\{\left(+\frac{2}{3}\right) + \left(+\frac{1}{3}\right)\right\} + (+5) \\
 &= (+1) + (+5) \\
 &= +6
 \end{aligned}$$

$$\begin{aligned}
 26 \quad & (+2) + (-3.2) + (+3) \\
 &= (+2) + (+3) + (-3.2) \\
 &= \{(+2) + (+3)\} + (-3.2) \\
 &= (+5) + (-3.2) \\
 &= +1.8
 \end{aligned}$$

$$\begin{aligned}
 27 \quad & (-4) + (+2.5) + (+4) \\
 &= (-4) + (+4) + (+2.5) \\
 &= \{(-4) + (+4)\} + (+2.5) \\
 &= 0 + (+2.5) \\
 &= +2.5
 \end{aligned}$$

$$\begin{aligned}
 28 \quad & (+3) + (-4.2) + (+7) \\
 &= (+3) + (+7) + (-4.2) \\
 &= \{(+3) + (+7)\} + (-4.2) \\
 &= (+10) + (-4.2) \\
 &= +5.8
 \end{aligned}$$

$$\begin{aligned}
 29 \quad & (+1.5) + (-7) + (+0.5) \\
 &= (+1.5) + (+0.5) + (-7) \\
 &= \{(+1.5) + (+0.5)\} + (-7) \\
 &= (+2) + (-7) \\
 &= -5
 \end{aligned}$$

$$\begin{aligned}
 30 \quad & (-7.5) + (+11) + (-2.5) \\
 &= (-7.5) + (-2.5) + (+11) \\
 &= \{(-7.5) + (-2.5)\} + (+11) \\
 &= (-10) + (+11) \\
 &= +1
 \end{aligned}$$

$$\begin{aligned}
 31 \quad & (+1.9) + (+19) + (-0.9) \\
 &= (+1.9) + (-0.9) + (+19) \\
 &= \{(+1.9) + (-0.9)\} + (+19) \\
 &= (+1) + (+19) \\
 &= +20
 \end{aligned}$$

$$\begin{aligned}
 32 \quad & \left(+\frac{1}{2}\right) + \left(-\frac{1}{3}\right) + \left(-\frac{1}{2}\right) \\
 &= \left(+\frac{1}{2}\right) + \left(-\frac{1}{2}\right) + \left(-\frac{1}{3}\right) \\
 &= \left\{\left(+\frac{1}{2}\right) + \left(-\frac{1}{2}\right)\right\} + \left(-\frac{1}{3}\right) \\
 &= 0 + \left(-\frac{1}{3}\right) = -\frac{1}{3}
 \end{aligned}$$

$$\begin{aligned}
 33 \quad & \left(-\frac{2}{3}\right) + \left(+\frac{1}{5}\right) + \left(-\frac{1}{3}\right) \\
 &= \left(-\frac{2}{3}\right) + \left(-\frac{1}{3}\right) + \left(+\frac{1}{5}\right) \\
 &= \left\{\left(-\frac{2}{3}\right) + \left(-\frac{1}{3}\right)\right\} + \left(+\frac{1}{5}\right) \\
 &= (-1) + \left(+\frac{1}{5}\right) \\
 &= \left(-\frac{5}{5}\right) + \left(+\frac{1}{5}\right) = -\frac{4}{5}
 \end{aligned}$$

$$\begin{aligned}
 34 \quad & \left(+\frac{5}{6}\right) + \left(-\frac{2}{3}\right) + \left(+\frac{7}{6}\right) \\
 &= \left(+\frac{5}{6}\right) + \left(+\frac{7}{6}\right) + \left(-\frac{2}{3}\right) \\
 &= \left\{\left(+\frac{5}{6}\right) + \left(+\frac{7}{6}\right)\right\} + \left(-\frac{2}{3}\right) \\
 &= (+2) + \left(-\frac{2}{3}\right) \\
 &= \left(+\frac{6}{3}\right) + \left(-\frac{2}{3}\right) = +\frac{4}{3}
 \end{aligned}$$

$$\begin{aligned}
 35 \quad & \left(+\frac{5}{4}\right) + \left(+\frac{1}{2}\right) + \left(+\frac{1}{4}\right) \\
 &= \left(+\frac{5}{4}\right) + \left(+\frac{1}{4}\right) + \left(+\frac{1}{2}\right) \\
 &= \left\{\left(+\frac{5}{4}\right) + \left(+\frac{1}{4}\right)\right\} + \left(+\frac{1}{2}\right) \\
 &= \left(+\frac{3}{2}\right) + \left(+\frac{1}{2}\right) \\
 &= +\frac{4}{2} = +2
 \end{aligned}$$

$$\begin{aligned}
36 \quad & \left(+\frac{3}{8}\right) + \left(-\frac{1}{4}\right) + \left(-\frac{1}{8}\right) \\
& = \left(+\frac{3}{8}\right) + \left(-\frac{1}{8}\right) + \left(-\frac{1}{4}\right) \\
& = \left\{\left(+\frac{3}{8}\right) + \left(-\frac{1}{8}\right)\right\} + \left(-\frac{1}{4}\right) \\
& = \left(+\frac{1}{4}\right) + \left(-\frac{1}{4}\right) \\
& = 0
\end{aligned}$$

$$\begin{aligned}
37 \quad & \left(-\frac{9}{7}\right) + \left(+\frac{3}{4}\right) + \left(+\frac{2}{7}\right) \\
& = \left(-\frac{9}{7}\right) + \left(+\frac{2}{7}\right) + \left(+\frac{3}{4}\right) \\
& = \left\{\left(-\frac{9}{7}\right) + \left(+\frac{2}{7}\right)\right\} + \left(+\frac{3}{4}\right) \\
& = (-1) + \left(+\frac{3}{4}\right) \\
& = \left(-\frac{4}{4}\right) + \left(+\frac{3}{4}\right) \\
& = -\frac{1}{4}
\end{aligned}$$

$$\begin{aligned}
38 \quad & \left(-\frac{13}{10}\right) + \left(-\frac{2}{7}\right) + \left(-\frac{17}{10}\right) \\
& = \left(-\frac{13}{10}\right) + \left(-\frac{17}{10}\right) + \left(-\frac{2}{7}\right) \\
& = \left\{\left(-\frac{13}{10}\right) + \left(-\frac{17}{10}\right)\right\} + \left(-\frac{2}{7}\right) \\
& = (-3) + \left(-\frac{2}{7}\right) \\
& = \left(-\frac{21}{7}\right) + \left(-\frac{2}{7}\right) \\
& = -\frac{23}{7}
\end{aligned}$$

$$\begin{aligned}
39 \quad & \left(+\frac{5}{3}\right) + \left(+\frac{1}{5}\right) + \left(+\frac{2}{3}\right) \\
& = \left(+\frac{5}{3}\right) + \left(+\frac{2}{3}\right) + \left(+\frac{1}{5}\right) \\
& = \left\{\left(+\frac{5}{3}\right) + \left(+\frac{2}{3}\right)\right\} + \left(+\frac{1}{5}\right) \\
& = \left(+\frac{7}{3}\right) + \left(+\frac{1}{5}\right) \\
& = \left(+\frac{35}{15}\right) + \left(+\frac{3}{15}\right) \\
& = +\frac{38}{15}
\end{aligned}$$

$$\begin{aligned}
40 \quad & \left(-\frac{4}{5}\right) + \left(+\frac{3}{2}\right) + \left(-\frac{3}{5}\right) \\
& = \left(-\frac{4}{5}\right) + \left(-\frac{3}{5}\right) + \left(+\frac{3}{2}\right) \\
& = \left\{\left(-\frac{4}{5}\right) + \left(-\frac{3}{5}\right)\right\} + \left(+\frac{3}{2}\right) \\
& = \left(-\frac{7}{5}\right) + \left(+\frac{3}{2}\right) \\
& = \left(-\frac{14}{10}\right) + \left(+\frac{15}{10}\right) = +\frac{1}{10}
\end{aligned}$$

$$\begin{aligned}
41 \quad & \left(+\frac{2}{9}\right) + \left(-\frac{3}{4}\right) + \left(+\frac{4}{9}\right) \\
& = \left(+\frac{2}{9}\right) + \left(+\frac{4}{9}\right) + \left(-\frac{3}{4}\right) \\
& = \left\{\left(+\frac{2}{9}\right) + \left(+\frac{4}{9}\right)\right\} + \left(-\frac{3}{4}\right) \\
& = \left(+\frac{2}{3}\right) + \left(-\frac{3}{4}\right) \\
& = \left(+\frac{8}{12}\right) + \left(-\frac{9}{12}\right) = -\frac{1}{12}
\end{aligned}$$

$$\begin{aligned}
42 \quad & (+0.7) + (-0.6) + (+0.3) \\
& = (+0.7) + (+0.3) + (-0.6) \\
& = \{(+0.7) + (+0.3)\} + (-0.6) \\
& = (+1) + (-0.6) \\
& = +0.4
\end{aligned}$$

$$\begin{aligned}
43 \quad & (-0.6) + (+0.9) + (-1.4) \\
& = (-0.6) + (-1.4) + (+0.9) \\
& = \{(-0.6) + (-1.4)\} + (+0.9) \\
& = (-2) + (+0.9) \\
& = -1.1
\end{aligned}$$

$$\begin{aligned}
44 \quad & (+2.5) + (-0.8) + (+0.5) \\
& = (+2.5) + (+0.5) + (-0.8) \\
& = \{(+2.5) + (+0.5)\} + (-0.8) \\
& = (+3) + (-0.8) \\
& = +2.2
\end{aligned}$$

$$\begin{aligned}
45 \quad & (-0.4) + (+1.1) + (-1.6) \\
& = (-0.4) + (-1.6) + (+1.1) \\
& = \{(-0.4) + (-1.6)\} + (+1.1) \\
& = (-2) + (+1.1) \\
& = -0.9
\end{aligned}$$

3 정수와 유리수의 덧셈과 뺄셈

- 46 $(+1.7) + (-0.9) + (-0.7)$
 $= (+1.7) + (-0.7) + (-0.9)$
 $= \{(+1.7) + (-0.7)\} + (-0.9)$
 $= (+1) + (-0.9)$
 $= +0.1$
- 47 $(+3.3) + (-1.4) + (-0.3)$
 $= (+3.3) + (-0.3) + (-1.4)$
 $= \{(+3.3) + (-0.3)\} + (-1.4)$
 $= (+3) + (-1.4)$
 $= +1.6$
- 48 $(-2.2) + (+0.5) + (-1.3)$
 $= (-2.2) + (-1.3) + (+0.5)$
 $= \{(-2.2) + (-1.3)\} + (+0.5)$
 $= (-3.5) + (+0.5)$
 $= -3$
- 49 $(-0.1) + (+0.7) + (-3.1)$
 $= (-0.1) + (-3.1) + (+0.7)$
 $= \{(-0.1) + (-3.1)\} + (+0.7)$
 $= (-3.2) + (+0.7)$
 $= -2.5$
- 50 $(+3.6) + (-1.6) + (-3.6)$
 $= (+3.6) + (-3.6) + (-1.6)$
 $= \{(+3.6) + (-3.6)\} + (-1.6)$
 $= 0 + (-1.6)$
 $= -1.6$
- 51 $(-0.9) + (+7.2) + (+0.9)$
 $= (-0.9) + (+0.9) + (+7.2)$
 $= \{(-0.9) + (+0.9)\} + (+7.2)$
 $= 0 + (+7.2)$
 $= +7.2$
- 52 $(+4.5) + (-5.7) + (+1.5)$
 $= (+4.5) + (+1.5) + (-5.7)$
 $= \{(+4.5) + (+1.5)\} + (-5.7)$
 $= (+6) + (-5.7)$
 $= +0.3$
- 53 $(-7.8) + (+11.4) + (-2.2)$
 $= (-7.8) + (-2.2) + (+11.4)$
 $= \{(-7.8) + (-2.2)\} + (+11.4)$
 $= (-10) + (+11.4)$
 $= +1.4$

10 두 수의 뺄셈

66쪽

- | | |
|---------------------|---------------------|
| ① $-$, 5, $+$, 2 | ③ $+$, 8, $+$, 11 |
| ② $-$, 6, $-$, 10 | ④ $+$, 1, $-$, 8 |

67쪽

- | | |
|----------|----------|
| ⑤ $-$ 6 | ⑪ $+$ 3 |
| ⑥ $-$ 5 | ⑫ $+$ 13 |
| ⑦ $-$ 6 | ⑬ $+$ 4 |
| ⑧ $-$ 7 | ⑭ $-$ 2 |
| ⑨ $-$ 15 | ⑮ $-$ 4 |
| ⑩ $-$ 25 | ⑯ $-$ 3 |

68쪽

❗ 계산 결과를 가분수 또는 기약분수로 나타내지 않아도 정답으로 인정합니다.

- | | |
|---|-----------------------|
| ⑰ $-$, $\frac{1}{4}$, 8, $-$, 5, $+$, | ⑳ $-$ 1 |
| $\frac{3}{20}$ | ㉑ $-$ $\frac{11}{8}$ |
| ㉒ $+$ $\frac{1}{3}$ | ㉓ $-$ $\frac{19}{12}$ |
| ㉔ $-$ $\frac{7}{6}$ | ㉕ $-$ $\frac{31}{6}$ |
| ㉖ $+$ $\frac{29}{26}$ | ㉗ $-$ $\frac{32}{45}$ |

69쪽

❗ 계산 결과를 가분수 또는 기약분수로 나타내지 않아도 정답으로 인정합니다.

- | | |
|---|----------------------|
| ㉘ $+$, $\frac{2}{3}$, 9, $+$, 8, $+$, | ㉙ $+$ 2 |
| $\frac{17}{12}$ | ㉚ $-$ $\frac{1}{3}$ |
| ㉛ $+$ 1 | ㉜ $-$ $\frac{1}{4}$ |
| ㉝ $+$ $\frac{3}{8}$ | ㉞ $+$ $\frac{3}{4}$ |
| ㉟ $+$ $\frac{4}{3}$ | ㊱ $+$ $\frac{5}{12}$ |

70쪽

$$\textcircled{35} -, 0.1, +, 0.2$$

$$\textcircled{36} -0.9$$

$$\textcircled{37} +0.8$$

$$\textcircled{38} -1.5$$

$$\textcircled{39} -4.1$$

$$\textcircled{40} +, 0.1, +, 0.6$$

$$\textcircled{41} +1.3$$

$$\textcircled{42} +3$$

$$\textcircled{43} +5.1$$

$$\textcircled{44} -6.2$$

71쪽

① 계산 결과를 가분수 또는 기약분수로 나타내지 않아도 정답으로 인정합니다.

$$\textcircled{45} -, \frac{1}{3}, 12, -, \frac{1}{3},$$

$$36, -, 5, +, \frac{31}{15}$$

$$\textcircled{46} -1$$

$$\textcircled{47} -7$$

$$\textcircled{48} -\frac{77}{30}$$

$$\textcircled{49} +, \frac{1}{2}, 13, +, \frac{1}{2},$$

$$13, +, 5, +, \frac{9}{5}$$

$$\textcircled{50} +\frac{7}{4}$$

$$\textcircled{51} -\frac{12}{5}$$

$$\textcircled{52} +\frac{6}{5}$$

$$\textcircled{5} (+1)-(+7)=(+1)+(-7)=-6$$

$$\textcircled{6} (+5)-(+10)=(+5)+(-10)=-5$$

$$\textcircled{7} 0-(+6)=0+(-6)=-6$$

$$\textcircled{8} (-3)-(+4)=(-3)+(-4)=-7$$

$$\textcircled{9} (-6)-(+9)=(-6)+(-9)=-15$$

$$\textcircled{10} (-11)-(+14)=(-11)+(-14)=-25$$

$$\textcircled{11} (+2)-(-1)=(+2)+(+1)=+3$$

$$\textcircled{12} (+8)-(-5)=(+8)+(+5)=+13$$

$$\textcircled{13} 0-(-4)=0+(+4)=+4$$

$$\textcircled{14} (-4)-(-2)=(-4)+(+2)=-2$$

$$\textcircled{15} (-7)-(-3)=(-7)+(+3)=-4$$

$$\textcircled{16} (-15)-(-12)=(-15)+(+12)=-3$$

$$\textcircled{18} \left(+\frac{2}{3}\right)-\left(+\frac{1}{3}\right)=\left(+\frac{2}{3}\right)+\left(-\frac{1}{3}\right)=+\frac{1}{3}$$

$$\begin{aligned}\textcircled{19} \left(+\frac{1}{6}\right)-\left(+\frac{4}{3}\right) &= \left(+\frac{1}{6}\right)+\left(-\frac{4}{3}\right) \\ &= \left(+\frac{1}{6}\right)+\left(-\frac{8}{6}\right) \\ &= -\frac{7}{6}\end{aligned}$$

$$\begin{aligned}\textcircled{20} \left(+\frac{3}{2}\right)-\left(+\frac{5}{13}\right) &= \left(+\frac{3}{2}\right)+\left(-\frac{5}{13}\right) \\ &= \left(+\frac{39}{26}\right)+\left(-\frac{10}{26}\right) \\ &= +\frac{29}{26}\end{aligned}$$

$$\begin{aligned}\textcircled{21} \left(-\frac{2}{7}\right)-\left(+\frac{5}{7}\right) &= \left(-\frac{2}{7}\right)+\left(-\frac{5}{7}\right) \\ &= -\frac{7}{7} = -1\end{aligned}$$

$$\begin{aligned}\textcircled{22} \left(-\frac{5}{4}\right)-\left(+\frac{1}{8}\right) &= \left(-\frac{5}{4}\right)+\left(-\frac{1}{8}\right) \\ &= \left(-\frac{10}{8}\right)+\left(-\frac{1}{8}\right) \\ &= -\frac{11}{8}\end{aligned}$$

$$\begin{aligned}\textcircled{23} \left(-\frac{7}{6}\right)-\left(+\frac{5}{12}\right) &= \left(-\frac{7}{6}\right)+\left(-\frac{5}{12}\right) \\ &= \left(-\frac{14}{12}\right)+\left(-\frac{5}{12}\right) \\ &= -\frac{19}{12}\end{aligned}$$

$$\begin{aligned}\textcircled{24} \left(-\frac{8}{3}\right)-\left(+\frac{5}{2}\right) &= \left(-\frac{8}{3}\right)+\left(-\frac{5}{2}\right) \\ &= \left(-\frac{16}{6}\right)+\left(-\frac{15}{6}\right) \\ &= -\frac{31}{6}\end{aligned}$$

$$\begin{aligned}\textcircled{25} \left(-\frac{1}{9}\right)-\left(+\frac{3}{5}\right) &= \left(-\frac{1}{9}\right)+\left(-\frac{3}{5}\right) \\ &= \left(-\frac{5}{45}\right)+\left(-\frac{27}{45}\right) \\ &= -\frac{32}{45}\end{aligned}$$

$$\begin{aligned}\textcircled{27} \left(+\frac{1}{5}\right)-\left(-\frac{4}{5}\right) &= \left(+\frac{1}{5}\right)+\left(+\frac{4}{5}\right) \\ &= +\frac{5}{5} = +1\end{aligned}$$

3 정수와 유리수의 덧셈과 뺄셈

$$\begin{aligned} 28 \quad \left(+\frac{1}{4}\right) - \left(-\frac{1}{8}\right) &= \left(+\frac{1}{4}\right) + \left(+\frac{1}{8}\right) \\ &= \left(+\frac{2}{8}\right) + \left(+\frac{1}{8}\right) \\ &= +\frac{3}{8} \end{aligned}$$

$$\begin{aligned} 29 \quad \left(+\frac{5}{6}\right) - \left(-\frac{1}{2}\right) &= \left(+\frac{5}{6}\right) + \left(+\frac{1}{2}\right) \\ &= \left(+\frac{5}{6}\right) + \left(+\frac{3}{6}\right) \\ &= +\frac{8}{6} = +\frac{4}{3} \end{aligned}$$

$$\begin{aligned} 30 \quad \left(-\frac{1}{3}\right) - \left(-\frac{7}{3}\right) &= \left(-\frac{1}{3}\right) + \left(+\frac{7}{3}\right) \\ &= +\frac{6}{3} = +2 \end{aligned}$$

$$\begin{aligned} 31 \quad \left(-\frac{5}{9}\right) - \left(-\frac{2}{9}\right) &= \left(-\frac{5}{9}\right) + \left(+\frac{2}{9}\right) \\ &= -\frac{3}{9} = -\frac{1}{3} \end{aligned}$$

$$\begin{aligned} 32 \quad \left(-\frac{1}{2}\right) - \left(-\frac{1}{4}\right) &= \left(-\frac{1}{2}\right) + \left(+\frac{1}{4}\right) \\ &= \left(-\frac{2}{4}\right) + \left(+\frac{1}{4}\right) \\ &= -\frac{1}{4} \end{aligned}$$

$$\begin{aligned} 33 \quad \left(-\frac{7}{12}\right) - \left(-\frac{4}{3}\right) &= \left(-\frac{7}{12}\right) + \left(+\frac{4}{3}\right) \\ &= \left(-\frac{7}{12}\right) + \left(+\frac{16}{12}\right) \\ &= +\frac{9}{12} = +\frac{3}{4} \end{aligned}$$

$$\begin{aligned} 34 \quad \left(-\frac{3}{4}\right) - \left(-\frac{7}{6}\right) &= \left(-\frac{3}{4}\right) + \left(+\frac{7}{6}\right) \\ &= \left(-\frac{9}{12}\right) + \left(+\frac{14}{12}\right) \\ &= +\frac{5}{12} \end{aligned}$$

$$36 \quad (+0.6) - (+1.5) = (+0.6) + (-1.5) = -0.9$$

$$37 \quad (+3.6) - (+2.8) = (+3.6) + (-2.8) = +0.8$$

$$38 \quad (-0.7) - (+0.8) = (-0.7) + (-0.8) = -1.5$$

$$39 \quad (-2.9) - (+1.2) = (-2.9) + (-1.2) = -4.1$$

$$41 \quad (+0.9) - (-0.4) = (+0.9) + (+0.4) = +1.3$$

$$42 \quad (+1.7) - (-1.3) = (+1.7) + (+1.3) = +3$$

$$43 \quad (-1.1) - (-6.2) = (-1.1) + (+6.2) = +5.1$$

$$44 \quad (-10.5) - (-4.3) = (-10.5) + (+4.3) = -6.2$$

$$\begin{aligned} 46 \quad \left(+\frac{3}{5}\right) - (+1.6) &= \left(+\frac{3}{5}\right) + (-1.6) \\ &= \left(+\frac{3}{5}\right) + \left(-\frac{8}{5}\right) \\ &= -\frac{5}{5} = -1 \end{aligned}$$

$$\begin{aligned} 47 \quad \left(-\frac{5}{2}\right) - (+4.5) &= \left(-\frac{5}{2}\right) + (-4.5) \\ &= \left(-\frac{5}{2}\right) + \left(-\frac{9}{2}\right) \\ &= -\frac{14}{2} = -7 \end{aligned}$$

$$\begin{aligned} 48 \quad (-1.4) - \left(+\frac{7}{6}\right) &= (-1.4) + \left(-\frac{7}{6}\right) \\ &= \left(-\frac{7}{5}\right) + \left(-\frac{7}{6}\right) \\ &= \left(-\frac{42}{30}\right) + \left(-\frac{35}{30}\right) = -\frac{77}{30} \end{aligned}$$

$$\begin{aligned} 50 \quad \left(+\frac{1}{4}\right) - (-1.5) &= \left(+\frac{1}{4}\right) + (+1.5) \\ &= \left(+\frac{1}{4}\right) + \left(+\frac{3}{2}\right) \\ &= \left(+\frac{1}{4}\right) + \left(+\frac{6}{4}\right) = +\frac{7}{4} \end{aligned}$$

$$\begin{aligned} 51 \quad (-3.3) - \left(-\frac{9}{10}\right) &= (-3.3) + \left(+\frac{9}{10}\right) \\ &= \left(-\frac{33}{10}\right) + \left(+\frac{9}{10}\right) \\ &= -\frac{24}{10} = -\frac{12}{5} \end{aligned}$$

$$\begin{aligned} 52 \quad \left(-\frac{3}{2}\right) - (-2.7) &= \left(-\frac{3}{2}\right) + (+2.7) \\ &= \left(-\frac{3}{2}\right) + \left(+\frac{27}{10}\right) \\ &= \left(-\frac{15}{10}\right) + \left(+\frac{27}{10}\right) \\ &= +\frac{12}{10} = +\frac{6}{5} \end{aligned}$$

72쪽

① $-6, -6, -6,$
 $-11, -9$

② $+,-,-,+,-,+,$
 $+\frac{3}{2}, +, +, 2$

73쪽

③ $+3$

④ -2

⑤ -10

⑥ $+5$

⑦ $+3$

⑧ -7

⑨ $+4$

⑩ -13

⑪ $+1$

⑫ $+8$

⑬ -8

⑭ $+3$

74쪽 ① 계산 결과를 가분수 또는 기약분수로 나타내지 않아도
정답으로 인정합니다.

⑮ $+\frac{13}{2}$

⑯ $-\frac{21}{5}$

⑰ $+\frac{5}{3}$

⑱ $+1$

㉑ $+\frac{35}{6}$

㉒ -9.7

㉓ $+13.2$

㉔ -0.8

㉕ $+3$

㉖ -1

㉗ -9

75쪽 ① 계산 결과를 가분수 또는 기약분수로 나타내지 않아도
정답으로 인정합니다.

㉘ $+\frac{5}{2}$

㉙ $-\frac{8}{21}$

㉚ $-\frac{5}{3}$

㉛ $-\frac{1}{4}$

㉜ $-\frac{11}{6}$

㉝ -0.1

㉞ -3

㉟ -2.4

㊱ $+\frac{3}{5}$

㊲ -11

76쪽

㊳ $+, +, -, +, +,$
 $-, +, 9, -, +, 6$

㊴ -7

㊵ $+9$

㊶ -2

㊷ -5

㊸ 0

㊹ -1

77쪽 ① 계산 결과를 가분수 또는 기약분수로 나타내지 않아도
정답으로 인정합니다.

㊺ $+\frac{4}{5}$

㊻ $-\frac{1}{3}$

㊼ $-\frac{5}{2}$

㊽ $-\frac{17}{10}$

㊾ $-\frac{1}{2}$

㊿ -0.6

㋀ $+0.5$

㋁ -6

㋂ -2.8

㋃ $-\frac{8}{5}$

㋄ $+\frac{1}{6}$

$$\begin{aligned} ③ \quad (+2) + (+4) - (+3) &= (+2) + (+4) + (-3) \\ &= \{(+2) + (+4)\} + (-3) \\ &= (+6) + (-3) \\ &= +3 \end{aligned}$$

$$\begin{aligned} ④ \quad (-1) - (+5) + (+4) &= (-1) + (-5) + (+4) \\ &= \{(-1) + (-5)\} + (+4) \\ &= (-6) + (+4) \\ &= -2 \end{aligned}$$

$$\begin{aligned} ⑤ \quad (+3) + (-7) - (+6) &= (+3) + (-7) + (-6) \\ &= (+3) + \{(-7) + (-6)\} \\ &= (+3) + (-13) \\ &= -10 \end{aligned}$$

$$\begin{aligned} ⑥ \quad (+9) - (-4) + (-8) &= (+9) + (+4) + (-8) \\ &= \{(+9) + (+4)\} + (-8) \\ &= (+13) + (-8) \\ &= +5 \end{aligned}$$

$$\begin{aligned} ⑦ \quad (+4) - (+7) + (+6) &= (+4) + (-7) + (+6) \\ &= \{(+4) + (+6)\} + (-7) \\ &= (+10) + (-7) \\ &= +3 \end{aligned}$$

3 정수와 유리수의 덧셈과 뺄셈

$$\begin{aligned} 8 \quad (-5) + (+1) - (+3) &= (-5) + (+1) + (-3) \\ &= \{(-5) + (-3)\} + (+1) \\ &= (-8) + (+1) \\ &= -7 \end{aligned}$$

$$\begin{aligned} 9 \quad (+3) + (-2) - (-3) &= (+3) + (-2) + (+3) \\ &= \{(+3) + (+3)\} + (-2) \\ &= (+6) + (-2) \\ &= +4 \end{aligned}$$

$$\begin{aligned} 10 \quad (-6) - (-1) + (-8) &= (-6) + (+1) + (-8) \\ &= \{(-6) + (-8)\} + (+1) \\ &= (-14) + (+1) \\ &= -13 \end{aligned}$$

$$\begin{aligned} 11 \quad (+8) - (+5) - (+2) &= (+8) + (-5) + (-2) \\ &= (+8) + \{(-5) + (-2)\} \\ &= (+8) + (-7) \\ &= +1 \end{aligned}$$

$$\begin{aligned} 12 \quad (-7) - (-6) - (-9) &= (-7) + (+6) + (+9) \\ &= (-7) + \{(+6) + (+9)\} \\ &= (-7) + (+15) \\ &= +8 \end{aligned}$$

$$\begin{aligned} 13 \quad (+1) - (-3) - (+12) &= (+1) + (+3) + (-12) \\ &= \{(+1) + (+3)\} + (-12) \\ &= (+4) + (-12) \\ &= -8 \end{aligned}$$

$$\begin{aligned} 14 \quad (-2) - (-10) - (+5) &= (-2) + (+10) + (-5) \\ &= \{(-2) + (-5)\} + (+10) \\ &= (-7) + (+10) \\ &= +3 \end{aligned}$$

$$\begin{aligned} 15 \quad (+5) - (-1) + \left(+\frac{1}{2}\right) &= (+5) + (+1) + \left(+\frac{1}{2}\right) \\ &= \{(+5) + (+1)\} + \left(+\frac{1}{2}\right) \\ &= (+6) + \left(+\frac{1}{2}\right) \\ &= \left(+\frac{12}{2}\right) + \left(+\frac{1}{2}\right) \\ &= +\frac{13}{2} \end{aligned}$$

$$\begin{aligned} 16 \quad (-2) - \left(-\frac{4}{5}\right) + (-3) &= (-2) + \left(+\frac{4}{5}\right) + (-3) \\ &= \{(-2) + (-3)\} + \left(+\frac{4}{5}\right) \\ &= (-5) + \left(+\frac{4}{5}\right) \\ &= \left(-\frac{25}{5}\right) + \left(+\frac{4}{5}\right) \\ &= -\frac{21}{5} \end{aligned}$$

$$\begin{aligned} 17 \quad \left(-\frac{4}{3}\right) - (-7) - (+4) &= \left(-\frac{4}{3}\right) + (+7) + (-4) \\ &= \left(-\frac{4}{3}\right) + \{(+7) + (-4)\} \\ &= \left(-\frac{4}{3}\right) + (+3) \\ &= \left(-\frac{4}{3}\right) + \left(+\frac{9}{3}\right) \\ &= +\frac{5}{3} \end{aligned}$$

$$\begin{aligned} 18 \quad (+2) + \left(+\frac{1}{4}\right) - \left(+\frac{5}{4}\right) &= (+2) + \left(+\frac{1}{4}\right) + \left(-\frac{5}{4}\right) \\ &= (+2) + \left\{\left(+\frac{1}{4}\right) + \left(-\frac{5}{4}\right)\right\} \\ &= (+2) + (-1) \\ &= +1 \end{aligned}$$

$$\begin{aligned} 19 \quad \left(+\frac{3}{2}\right) - (-5) - \left(+\frac{2}{3}\right) &= \left(+\frac{3}{2}\right) + (+5) + \left(-\frac{2}{3}\right) \\ &= \left\{\left(+\frac{3}{2}\right) + \left(-\frac{2}{3}\right)\right\} + (+5) \\ &= \left\{\left(+\frac{9}{6}\right) + \left(-\frac{4}{6}\right)\right\} + (+5) \\ &= \left(+\frac{5}{6}\right) + \left(+\frac{30}{6}\right) \\ &= +\frac{35}{6} \end{aligned}$$

$$\begin{aligned}
20 \quad & (-6) + (-3) - (+0.7) \\
& = (-6) + (-3) + (-0.7) \\
& = \{(-6) + (-3)\} + (-0.7) \\
& = (-9) + (-0.7) \\
& = -9.7
\end{aligned}$$

$$\begin{aligned}
21 \quad & (+4) - (-2.2) + (+7) \\
& = (+4) + (+2.2) + (+7) \\
& = \{(+4) + (+7)\} + (+2.2) \\
& = (+11) + (+2.2) \\
& = +13.2
\end{aligned}$$

$$\begin{aligned}
22 \quad & (-5) + (-1.9) - (-6.1) \\
& = (-5) + (-1.9) + (+6.1) \\
& = (-5) + \{(-1.9) + (+6.1)\} \\
& = (-5) + (+4.2) \\
& = -0.8
\end{aligned}$$

$$\begin{aligned}
23 \quad & (+3.5) - (-0.5) - (+1) \\
& = (+3.5) + (+0.5) + (-1) \\
& = \{(+3.5) + (+0.5)\} + (-1) \\
& = (+4) + (-1) \\
& = +3
\end{aligned}$$

$$\begin{aligned}
24 \quad & (-4.6) + (+9) - (+5.4) \\
& = (-4.6) + (+9) + (-5.4) \\
& = \{(-4.6) + (-5.4)\} + (+9) \\
& = (-10) + (+9) \\
& = -1
\end{aligned}$$

$$\begin{aligned}
25 \quad & (+10.7) - (+21) - (-1.3) \\
& = (+10.7) + (-21) + (+1.3) \\
& = \{(+10.7) + (+1.3)\} + (-21) \\
& = (+12) + (-21) \\
& = -9
\end{aligned}$$

$$\begin{aligned}
26 \quad & \left(+\frac{1}{2}\right) - \left(-\frac{7}{2}\right) + \left(-\frac{3}{2}\right) \\
& = \left(+\frac{1}{2}\right) + \left(+\frac{7}{2}\right) + \left(-\frac{3}{2}\right) \\
& = \left\{\left(+\frac{1}{2}\right) + \left(+\frac{7}{2}\right)\right\} + \left(-\frac{3}{2}\right) \\
& = \left(+\frac{8}{2}\right) + \left(-\frac{3}{2}\right) \\
& = +\frac{5}{2}
\end{aligned}$$

$$\begin{aligned}
27 \quad & \left(+\frac{2}{7}\right) + \left(-\frac{1}{3}\right) - \left(+\frac{1}{3}\right) \\
& = \left(+\frac{2}{7}\right) + \left(-\frac{1}{3}\right) + \left(-\frac{1}{3}\right) \\
& = \left(+\frac{2}{7}\right) + \left\{\left(-\frac{1}{3}\right) + \left(-\frac{1}{3}\right)\right\} \\
& = \left(+\frac{2}{7}\right) + \left(-\frac{2}{3}\right) \\
& = \left(+\frac{6}{21}\right) + \left(-\frac{14}{21}\right) \\
& = -\frac{8}{21}
\end{aligned}$$

$$\begin{aligned}
28 \quad & \left(-\frac{1}{6}\right) + \left(-\frac{7}{3}\right) - \left(-\frac{5}{6}\right) \\
& = \left(-\frac{1}{6}\right) + \left(-\frac{7}{3}\right) + \left(+\frac{5}{6}\right) \\
& = \left\{\left(-\frac{1}{6}\right) + \left(+\frac{5}{6}\right)\right\} + \left(-\frac{7}{3}\right) \\
& = \left(+\frac{2}{3}\right) + \left(-\frac{7}{3}\right) \\
& = -\frac{5}{3}
\end{aligned}$$

$$\begin{aligned}
29 \quad & \left(+\frac{4}{5}\right) + \left(-\frac{5}{4}\right) - \left(-\frac{1}{5}\right) \\
& = \left(+\frac{4}{5}\right) + \left(-\frac{5}{4}\right) + \left(+\frac{1}{5}\right) \\
& = \left\{\left(+\frac{4}{5}\right) + \left(+\frac{1}{5}\right)\right\} + \left(-\frac{5}{4}\right) \\
& = (+1) + \left(-\frac{5}{4}\right) \\
& = \left(+\frac{4}{4}\right) + \left(-\frac{5}{4}\right) \\
& = -\frac{1}{4}
\end{aligned}$$

$$\begin{aligned}
30 \quad & \left(+\frac{2}{3}\right) - \left(+\frac{7}{6}\right) - \left(+\frac{4}{3}\right) \\
& = \left(+\frac{2}{3}\right) + \left(-\frac{7}{6}\right) + \left(-\frac{4}{3}\right) \\
& = \left\{\left(+\frac{2}{3}\right) + \left(-\frac{4}{3}\right)\right\} + \left(-\frac{7}{6}\right) \\
& = \left(-\frac{2}{3}\right) + \left(-\frac{7}{6}\right) \\
& = \left(-\frac{4}{6}\right) + \left(-\frac{7}{6}\right) \\
& = -\frac{11}{6}
\end{aligned}$$

3 정수와 유리수의 덧셈과 뺄셈

$$\begin{aligned}
 31 \quad & (+0.7) - (+0.3) + (-0.5) \\
 & = (+0.7) + (-0.3) + (-0.5) \\
 & = (+0.7) + \{(-0.3) + (-0.5)\} \\
 & = (+0.7) + (-0.8) \\
 & = -0.1
 \end{aligned}$$

$$\begin{aligned}
 32 \quad & (-1.2) + (+0.9) - (+2.7) \\
 & = (-1.2) + (+0.9) + (-2.7) \\
 & = \{(-1.2) + (-2.7)\} + (+0.9) \\
 & = (-3.9) + (+0.9) \\
 & = -3
 \end{aligned}$$

$$\begin{aligned}
 33 \quad & (-3.6) - (-1.5) - (+0.3) \\
 & = (-3.6) + (+1.5) + (-0.3) \\
 & = \{(-3.6) + (-0.3)\} + (+1.5) \\
 & = (-3.9) + (+1.5) \\
 & = -2.4
 \end{aligned}$$

$$\begin{aligned}
 34 \quad & (+0.8) - (-0.2) + \left(-\frac{2}{5}\right) \\
 & = (+0.8) + (+0.2) + \left(-\frac{2}{5}\right) \\
 & = \{(+0.8) + (+0.2)\} + \left(-\frac{2}{5}\right) \\
 & = (+1) + \left(-\frac{2}{5}\right) \\
 & = \left(+\frac{5}{5}\right) + \left(-\frac{2}{5}\right) \\
 & = +\frac{3}{5}
 \end{aligned}$$

$$\begin{aligned}
 35 \quad & (-4.4) - \left(+\frac{9}{2}\right) - (+2.1) \\
 & = (-4.4) + \left(-\frac{9}{2}\right) + (-2.1) \\
 & = \{(-4.4) + (-2.1)\} + \left(-\frac{9}{2}\right) \\
 & = (-6.5) + \left(-\frac{9}{2}\right) \\
 & = \left(-\frac{13}{2}\right) + \left(-\frac{9}{2}\right) \\
 & = -\frac{22}{2} = -11
 \end{aligned}$$

$$37 \quad 2 - 9 = (+2) - (+9) = (+2) + (-9) = -7$$

$$38 \quad -12 + 21 = (-12) + (+21) = +9$$

$$\begin{aligned}
 39 \quad & 7 + 1 - 10 = (+7) + (+1) - (+10) \\
 & = (+7) + (+1) + (-10) \\
 & = \{(+7) + (+1)\} + (-10) \\
 & = (+8) + (-10) \\
 & = -2
 \end{aligned}$$

$$\begin{aligned}
 40 \quad & 4 - 3 - 6 = (+4) - (+3) - (+6) \\
 & = (+4) + (-3) + (-6) \\
 & = (+4) + \{(-3) + (-6)\} \\
 & = (+4) + (-9) \\
 & = -5
 \end{aligned}$$

$$\begin{aligned}
 41 \quad & -1 + 4 - 3 = (-1) + (+4) - (+3) \\
 & = (-1) + (+4) + (-3) \\
 & = \{(-1) + (-3)\} + (+4) \\
 & = (-4) + (+4) \\
 & = 0
 \end{aligned}$$

$$\begin{aligned}
 42 \quad & -9 - 5 + 13 = (-9) - (+5) + (+13) \\
 & = (-9) + (-5) + (+13) \\
 & = \{(-9) + (-5)\} + (+13) \\
 & = (-14) + (+13) \\
 & = -1
 \end{aligned}$$

$$43 \quad -\frac{3}{5} + \frac{7}{5} = \left(-\frac{3}{5}\right) + \left(+\frac{7}{5}\right) = +\frac{4}{5}$$

$$\begin{aligned}
 44 \quad & 1 - \frac{4}{3} = (+1) - \left(+\frac{4}{3}\right) \\
 & = (+1) + \left(-\frac{4}{3}\right) \\
 & = \left(+\frac{3}{3}\right) + \left(-\frac{4}{3}\right) = -\frac{1}{3}
 \end{aligned}$$

$$\begin{aligned}
 45 \quad & 5 - \frac{9}{2} - 3 = (+5) - \left(+\frac{9}{2}\right) - (+3) \\
 & = (+5) + \left(-\frac{9}{2}\right) + (-3) \\
 & = \{(+5) + (-3)\} + \left(-\frac{9}{2}\right) \\
 & = (+2) + \left(-\frac{9}{2}\right) \\
 & = \left(+\frac{4}{2}\right) + \left(-\frac{9}{2}\right) \\
 & = -\frac{5}{2}
 \end{aligned}$$

$$\begin{aligned}
 46 \quad -2 - \frac{1}{5} + \frac{1}{2} &= (-2) - \left(+\frac{1}{5}\right) + \left(+\frac{1}{2}\right) \\
 &= (-2) + \left(-\frac{1}{5}\right) + \left(+\frac{1}{2}\right) \\
 &= (-2) + \left\{\left(-\frac{1}{5}\right) + \left(+\frac{1}{2}\right)\right\} \\
 &= (-2) + \left\{\left(-\frac{2}{10}\right) + \left(+\frac{5}{10}\right)\right\} \\
 &= \left(-\frac{20}{10}\right) + \left(+\frac{3}{10}\right) \\
 &= -\frac{17}{10}
 \end{aligned}$$

$$\begin{aligned}
 47 \quad -\frac{7}{6} + \frac{11}{12} - \frac{1}{4} &= \left(-\frac{7}{6}\right) + \left(+\frac{11}{12}\right) - \left(+\frac{1}{4}\right) \\
 &= \left(-\frac{7}{6}\right) + \left(+\frac{11}{12}\right) + \left(-\frac{1}{4}\right) \\
 &= \left\{\left(-\frac{7}{6}\right) + \left(-\frac{1}{4}\right)\right\} + \left(+\frac{11}{12}\right) \\
 &= \left\{\left(-\frac{14}{12}\right) + \left(-\frac{3}{12}\right)\right\} + \left(+\frac{11}{12}\right) \\
 &= \left(-\frac{17}{12}\right) + \left(+\frac{11}{12}\right) \\
 &= -\frac{6}{12} = -\frac{1}{2}
 \end{aligned}$$

$$48 \quad -1.4 + 0.8 = (-1.4) + (+0.8) = -0.6$$

$$\begin{aligned}
 49 \quad 4 - 0.4 - 3.1 &= (+4) - (+0.4) - (+3.1) \\
 &= (+4) + (-0.4) + (-3.1) \\
 &= (+4) + \{(-0.4) + (-3.1)\} \\
 &= (+4) + (-3.5) \\
 &= +0.5
 \end{aligned}$$

$$\begin{aligned}
 50 \quad 0.7 - 9 + 2.3 &= (+0.7) - (+9) + (+2.3) \\
 &= (+0.7) + (-9) + (+2.3) \\
 &= \{(+0.7) + (+2.3)\} + (-9) \\
 &= (+3) + (-9) \\
 &= -6
 \end{aligned}$$

$$\begin{aligned}
 51 \quad -2.1 - 4.2 + 3.5 &= (-2.1) - (+4.2) + (+3.5) \\
 &= (-2.1) + (-4.2) + (+3.5) \\
 &= \{(-2.1) + (-4.2)\} + (+3.5) \\
 &= (-6.3) + (+3.5) \\
 &= -2.8
 \end{aligned}$$

$$\begin{aligned}
 52 \quad 1.9 - \frac{7}{2} &= (+1.9) - \left(+\frac{7}{2}\right) \\
 &= (+1.9) + \left(-\frac{7}{2}\right) \\
 &= \left(+\frac{19}{10}\right) + \left(-\frac{35}{10}\right) \\
 &= -\frac{16}{10} = -\frac{8}{5}
 \end{aligned}$$

$$\begin{aligned}
 53 \quad -0.2 + \frac{2}{3} - 0.3 &= (-0.2) + \left(+\frac{2}{3}\right) - (+0.3) \\
 &= (-0.2) + \left(+\frac{2}{3}\right) + (-0.3) \\
 &= \{(-0.2) + (-0.3)\} + \left(+\frac{2}{3}\right) \\
 &= (-0.5) + \left(+\frac{2}{3}\right) \\
 &= \left(-\frac{1}{2}\right) + \left(+\frac{2}{3}\right) \\
 &= \left(-\frac{3}{6}\right) + \left(+\frac{4}{6}\right) \\
 &= +\frac{1}{6}
 \end{aligned}$$

12

정수와 유리수의 덧셈과 뺄셈 평가

78쪽

① 계산 결과를 가분수 또는 기약분수로 나타내지 않아도 정답으로 인정합니다.

① -2

② -6

③ -4

④ $+8$

⑤ -11

⑥ $+5$

⑦ -3

⑧ $+\frac{6}{5}$

3 정수와 유리수의 덧셈과 뺄셈

79쪽 ① 계산 결과를 가분수 또는 기약분수로 나타내지 않아도 정답으로 인정합니다.

⑨ $-\frac{3}{4}$

⑩ $-\frac{13}{12}$

⑪ -1.8

⑫ -2.3

⑬ $-\frac{11}{20}$

⑭ $-4, -4, +12,$
 $-4, +8$

/ (가), (나)

⑮ $-\frac{3}{4}, -\frac{3}{4}, -\frac{7}{2},$
 -2

/ (가), (나)

80쪽 ① 계산 결과를 가분수 또는 기약분수로 나타내지 않아도 정답으로 인정합니다.

⑯ $+2$

⑰ -17

⑱ $+35$

⑲ $+\frac{1}{3}$

⑳ $-\frac{1}{6}$

㉑ $+\frac{29}{22}$

㉒ -0.7

㉓ $+3.4$

㉔ $-\frac{18}{7}$

㉕ $+\frac{23}{15}$

81쪽

㉖ -5

㉗ $-\frac{1}{2}$

㉘ $+2.1$

㉙ $-\frac{11}{12}$

㉚ $+5.6$

㉛ -4

㉜ $-\frac{7}{24}$

㉝ $+4$

㉞ $+1.3$

㉟ $-\frac{11}{90}$

④ $(+3) + (+5) = +(3+5) = +8$

⑤ $(-7) + (-4) = -(7+4) = -11$

⑥ $(-6) + (+11) = +(11-6) = +5$

⑦ $(+2) + (-5) = -(5-2) = -3$

⑧ $(+\frac{4}{5}) + (+\frac{2}{5}) = +(\frac{4}{5} + \frac{2}{5}) = +\frac{6}{5}$

$$\begin{aligned} \textcircled{9} \quad (+\frac{5}{4}) + (-2) &= (+\frac{5}{4}) + (-\frac{8}{4}) \\ &= -(\frac{8}{4} - \frac{5}{4}) \\ &= -\frac{3}{4} \end{aligned}$$

$$\begin{aligned} \textcircled{10} \quad (-\frac{5}{6}) + (-\frac{1}{4}) &= -(\frac{5}{6} + \frac{1}{4}) \\ &= -(\frac{10}{12} + \frac{3}{12}) \\ &= -\frac{13}{12} \end{aligned}$$

⑪ $(-5) + (+3.2) = -(5-3.2) = -1.8$

⑫ $(-0.8) + (-1.5) = -(0.8+1.5) = -2.3$

$$\begin{aligned} \textcircled{13} \quad (+3.2) + (-\frac{15}{4}) &= (+\frac{16}{5}) + (-\frac{15}{4}) \\ &= (+\frac{64}{20}) + (-\frac{75}{20}) \\ &= -(\frac{75}{20} - \frac{64}{20}) \\ &= -\frac{11}{20} \end{aligned}$$

⑯ $(+4) - (+2) = (+4) + (-2) = +2$

$$\begin{aligned} \textcircled{17} \quad (-8) - (+9) &= (-8) + (-9) \\ &= -(8+9) = -17 \end{aligned}$$

$$\begin{aligned} \textcircled{18} \quad (+20) - (-15) &= (+20) + (+15) \\ &= +(20+15) \\ &= +35 \end{aligned}$$

$$\begin{aligned} \textcircled{19} \quad (-\frac{5}{9}) - (-\frac{8}{9}) &= (-\frac{5}{9}) + (+\frac{8}{9}) \\ &= +\frac{3}{9} = +\frac{1}{3} \end{aligned}$$

$$\begin{aligned} \textcircled{20} \quad (+\frac{1}{6}) - (+\frac{1}{3}) &= (+\frac{1}{6}) + (-\frac{1}{3}) \\ &= (+\frac{1}{6}) + (-\frac{2}{6}) \\ &= -\frac{1}{6} \end{aligned}$$

$$\begin{aligned} 21 \quad & \left(-\frac{2}{11}\right) - \left(-\frac{3}{2}\right) = \left(-\frac{2}{11}\right) + \left(+\frac{3}{2}\right) \\ & = \left(-\frac{4}{22}\right) + \left(+\frac{33}{22}\right) \\ & = +\frac{29}{22} \end{aligned}$$

$$22 \quad (+3.8) - (+4.5) = (+3.8) + (-4.5) = -0.7$$

$$23 \quad (+2.5) - (-0.9) = (+2.5) + (+0.9) = +3.4$$

$$\begin{aligned} 24 \quad & (-2) - \left(+\frac{4}{7}\right) = (-2) + \left(-\frac{4}{7}\right) \\ & = \left(-\frac{14}{7}\right) + \left(-\frac{4}{7}\right) \\ & = -\frac{18}{7} \end{aligned}$$

$$\begin{aligned} 25 \quad & \left(+\frac{1}{3}\right) - (-1.2) = \left(+\frac{1}{3}\right) + (+1.2) \\ & = \left(+\frac{1}{3}\right) + \left(+\frac{6}{5}\right) \\ & = \left(+\frac{5}{15}\right) + \left(+\frac{18}{15}\right) \\ & = +\frac{23}{15} \end{aligned}$$

$$\begin{aligned} 26 \quad & (+5) + (-3) - (+7) = (+5) + (-3) + (-7) \\ & = (+5) + \{(-3) + (-7)\} \\ & = (+5) + (-10) \\ & = -5 \end{aligned}$$

$$\begin{aligned} 27 \quad & \left(-\frac{3}{4}\right) - (-2) + \left(-\frac{7}{4}\right) \\ & = \left(-\frac{3}{4}\right) + (+2) + \left(-\frac{7}{4}\right) \\ & = \left\{\left(-\frac{3}{4}\right) + \left(-\frac{7}{4}\right)\right\} + (+2) \\ & = \left(-\frac{5}{2}\right) + (+2) \\ & = \left(-\frac{5}{2}\right) + \left(+\frac{4}{2}\right) \\ & = -\frac{1}{2} \end{aligned}$$

$$\begin{aligned} 28 \quad & (+2.5) - (-1.6) - (+2) \\ & = (+2.5) + (+1.6) + (-2) \\ & = \{(+2.5) + (+1.6)\} + (-2) \\ & = (+4.1) + (-2) \\ & = +2.1 \end{aligned}$$

$$\begin{aligned} 29 \quad & \left(-\frac{2}{3}\right) + \left(+\frac{1}{6}\right) - \left(+\frac{5}{12}\right) \\ & = \left(-\frac{2}{3}\right) + \left(+\frac{1}{6}\right) + \left(-\frac{5}{12}\right) \\ & = \left\{\left(-\frac{2}{3}\right) + \left(-\frac{5}{12}\right)\right\} + \left(+\frac{1}{6}\right) \\ & = \left\{\left(-\frac{8}{12}\right) + \left(-\frac{5}{12}\right)\right\} + \left(+\frac{1}{6}\right) \\ & = \left(-\frac{13}{12}\right) + \left(+\frac{2}{12}\right) = -\frac{11}{12} \end{aligned}$$

$$\begin{aligned} 30 \quad & \left(+\frac{7}{2}\right) - (+2.4) - \left(-\frac{9}{2}\right) \\ & = \left(+\frac{7}{2}\right) + (-2.4) + \left(+\frac{9}{2}\right) \\ & = \left\{\left(+\frac{7}{2}\right) + \left(+\frac{9}{2}\right)\right\} + (-2.4) \\ & = (+8) + (-2.4) = +5.6 \end{aligned}$$

$$31 \quad 8 - 12 = (+8) - (+12) = (+8) + (-12) = -4$$

$$\begin{aligned} 32 \quad & -\frac{5}{8} + \frac{1}{3} = \left(-\frac{5}{8}\right) + \left(+\frac{1}{3}\right) \\ & = \left(-\frac{15}{24}\right) + \left(+\frac{8}{24}\right) = -\frac{7}{24} \end{aligned}$$

$$\begin{aligned} 33 \quad & -5 + 16 - 7 = (-5) + (+16) - (+7) \\ & = (-5) + (+16) + (-7) \\ & = \{(-5) + (-7)\} + (+16) \\ & = (-12) + (+16) = +4 \end{aligned}$$

$$\begin{aligned} 34 \quad & -1.4 - 2.6 + 5.3 = (-1.4) - (+2.6) + (+5.3) \\ & = (-1.4) + (-2.6) + (+5.3) \\ & = \{(-1.4) + (-2.6)\} + (+5.3) \\ & = (-4) + (+5.3) = +1.3 \end{aligned}$$

$$\begin{aligned} 35 \quad & \frac{10}{9} - 0.9 - \frac{1}{3} = \left(+\frac{10}{9}\right) - (+0.9) - \left(+\frac{1}{3}\right) \\ & = \left(+\frac{10}{9}\right) + (-0.9) + \left(-\frac{1}{3}\right) \\ & = \left\{\left(+\frac{10}{9}\right) + \left(-\frac{1}{3}\right)\right\} + (-0.9) \\ & = \left\{\left(+\frac{10}{9}\right) + \left(-\frac{3}{9}\right)\right\} + (-0.9) \\ & = \left(+\frac{7}{9}\right) + \left(-\frac{9}{10}\right) \\ & = \left(+\frac{70}{90}\right) + \left(-\frac{81}{90}\right) = -\frac{11}{90} \end{aligned}$$

4 정수와 유리수의 곱셈과 나눗셈

13

부호가 같은 두 수의 곱셈

84쪽

- ① $+, +, 8$
- ② $+15$

- ③ $+, +, 7$
- ④ $+8$

85쪽

- ⑤ $+8$
- ⑥ $+12$
- ⑦ $+28$
- ⑧ $+25$
- ⑨ $+36$
- ⑩ $+220$

- ⑪ $+5$
- ⑫ $+12$
- ⑬ $+54$
- ⑭ $+49$
- ⑮ $+90$
- ⑯ $+252$

86쪽

① 계산 결과를 가분수 또는 기약분수로 나타내지 않아도 정답으로 인정합니다.

- ⑰ $+, +, \frac{4}{3}$
- ⑱ $+2$
- ㉑ $+6$
- ㉒ $+\frac{28}{3}$
- ㉓ $+\frac{7}{4}$

- ㉔ $+, +, 7.5$
- ㉕ $+1.4$
- ㉖ $+3.2$
- ㉗ $+3.2$
- ㉘ $+3.3$
- ㉙ $+1.61$

87쪽

① 계산 결과를 가분수 또는 기약분수로 나타내지 않아도 정답으로 인정합니다.

- ㉚ $+, +, \frac{9}{2}$
- ㉛ $+6$
- ㉜ $+\frac{55}{3}$
- ㉝ $+\frac{13}{3}$
- ㉞ $+\frac{21}{10}$

- ㉟ $+, +, 4.8$
- ㊱ $+4.5$
- ㊲ $+2$
- ㊳ $+13.6$
- ㊴ $+11.9$
- ㊵ $+1.04$

88쪽

① 계산 결과를 가분수 또는 기약분수로 나타내지 않아도 정답으로 인정합니다.

- ㊶ $+, +, \frac{7}{10}$
- ㊷ $+\frac{1}{10}$
- ㊸ $+\frac{1}{5}$
- ㊹ $+\frac{5}{18}$
- ㊺ $+12$

- ㊻ $+, +, 1.84$
- ㊼ $+0.36$
- ㊽ $+1.8$
- ㊾ $+0.024$
- ㊿ $+\frac{7}{15}$
- ㋀ $+\frac{32}{5}$

89쪽

① 계산 결과를 가분수 또는 기약분수로 나타내지 않아도 정답으로 인정합니다.

- ㋁ $+, +, \frac{6}{5}$
- ㋂ $+\frac{1}{12}$
- ㋃ $+\frac{1}{3}$
- ㋄ $+\frac{4}{15}$
- ㋅ $+\frac{3}{2}$

- ㋆ $+, +, 1.28$
- ㋇ $+0.35$
- ㋈ $+5.32$
- ㋉ $+0.084$
- ㋊ $+3$
- ㋋ $+\frac{33}{10}$

- ② $(+5) \times (+3) = +(5 \times 3) = +15$
- ④ $(-2) \times (-4) = +(2 \times 4) = +8$
- ⑤ $(+1) \times (+8) = +(1 \times 8) = +8$
- ⑥ $(+6) \times (+2) = +(6 \times 2) = +12$
- ⑦ $(+7) \times (+4) = +(7 \times 4) = +28$
- ⑧ $(+5) \times (+5) = +(5 \times 5) = +25$
- ⑨ $(+3) \times (+12) = +(3 \times 12) = +36$
- ⑩ $(+20) \times (+11) = +(20 \times 11) = +220$
- ⑪ $(-5) \times (-1) = +(5 \times 1) = +5$
- ⑫ $(-4) \times (-3) = +(4 \times 3) = +12$
- ⑬ $(-9) \times (-6) = +(9 \times 6) = +54$
- ⑭ $(-7) \times (-7) = +(7 \times 7) = +49$

$$\begin{aligned}
15 \quad & (-6) \times (-15) = +(6 \times 15) = +90 \\
16 \quad & (-12) \times (-21) = +(12 \times 21) = +252 \\
18 \quad & \left(+\frac{1}{3}\right) \times (+6) = +\left(\frac{1}{3} \times 6\right) = +2 \\
19 \quad & (+4) \times \left(+\frac{3}{2}\right) = +\left(4 \times \frac{3}{2}\right) = +6 \\
20 \quad & \left(+\frac{2}{3}\right) \times (+14) = +\left(\frac{2}{3} \times 14\right) = +\frac{28}{3} \\
21 \quad & (+3) \times \left(+\frac{7}{12}\right) = +\left(3 \times \frac{7}{12}\right) = +\frac{7}{4} \\
23 \quad & (+0.2) \times (+7) = +(0.2 \times 7) = +1.4 \\
24 \quad & (+4) \times (+0.8) = +(4 \times 0.8) = +3.2 \\
25 \quad & (+1.6) \times (+2) = +(1.6 \times 2) = +3.2 \\
26 \quad & (+11) \times (+0.3) = +(11 \times 0.3) = +3.3 \\
27 \quad & (+0.23) \times (+7) = +(0.23 \times 7) = +1.61 \\
29 \quad & (-7) \times \left(-\frac{6}{7}\right) = +\left(7 \times \frac{6}{7}\right) = +6 \\
30 \quad & \left(-\frac{11}{6}\right) \times (-10) = +\left(\frac{11}{6} \times 10\right) = +\frac{55}{3} \\
31 \quad & (-9) \times \left(-\frac{13}{27}\right) = +\left(9 \times \frac{13}{27}\right) = +\frac{13}{3} \\
32 \quad & \left(-\frac{7}{10}\right) \times (-3) = +\left(\frac{7}{10} \times 3\right) = +\frac{21}{10} \\
34 \quad & (-0.5) \times (-9) = +(0.5 \times 9) = +4.5 \\
35 \quad & (-5) \times (-0.4) = +(5 \times 0.4) = +2 \\
36 \quad & (-6.8) \times (-2) = +(6.8 \times 2) = +13.6 \\
37 \quad & (-7) \times (-1.7) = +(7 \times 1.7) = +11.9 \\
38 \quad & (-0.26) \times (-4) = +(0.26 \times 4) = +1.04 \\
40 \quad & \left(+\frac{1}{2}\right) \times \left(+\frac{1}{5}\right) = +\left(\frac{1}{2} \times \frac{1}{5}\right) = +\frac{1}{10} \\
41 \quad & \left(+\frac{6}{5}\right) \times \left(+\frac{1}{6}\right) = +\left(\frac{6}{5} \times \frac{1}{6}\right) = +\frac{1}{5} \\
42 \quad & \left(+\frac{2}{3}\right) \times \left(+\frac{5}{12}\right) = +\left(\frac{2}{3} \times \frac{5}{12}\right) = +\frac{5}{18}
\end{aligned}$$

$$\begin{aligned}
43 \quad & \left(+\frac{15}{4}\right) \times \left(+\frac{16}{5}\right) = +\left(\frac{15}{4} \times \frac{16}{5}\right) = +12 \\
45 \quad & (+0.9) \times (+0.4) = +(0.9 \times 0.4) = +0.36 \\
46 \quad & (+1.5) \times (+1.2) = +(1.5 \times 1.2) = +1.8 \\
47 \quad & (+0.12) \times (+0.2) = +(0.12 \times 0.2) = +0.024 \\
48 \quad & (+0.7) \times \left(+\frac{2}{3}\right) = +\left(0.7 \times \frac{2}{3}\right) \\
& \quad \quad \quad = +\left(\frac{7}{10} \times \frac{2}{3}\right) \\
& \quad \quad \quad = +\frac{7}{15} \\
49 \quad & (+2.4) \times \left(+\frac{8}{3}\right) = +\left(2.4 \times \frac{8}{3}\right) \\
& \quad \quad \quad = +\left(\frac{12}{5} \times \frac{8}{3}\right) \\
& \quad \quad \quad = +\frac{32}{5} \\
51 \quad & \left(-\frac{1}{6}\right) \times \left(-\frac{1}{2}\right) = +\left(\frac{1}{6} \times \frac{1}{2}\right) = +\frac{1}{12} \\
52 \quad & \left(-\frac{4}{3}\right) \times \left(-\frac{1}{4}\right) = +\left(\frac{4}{3} \times \frac{1}{4}\right) = +\frac{1}{3} \\
53 \quad & \left(-\frac{1}{3}\right) \times \left(-\frac{4}{5}\right) = +\left(\frac{1}{3} \times \frac{4}{5}\right) = +\frac{4}{15} \\
54 \quad & \left(-\frac{9}{8}\right) \times \left(-\frac{4}{3}\right) = +\left(\frac{9}{8} \times \frac{4}{3}\right) = +\frac{3}{2} \\
56 \quad & (-0.7) \times (-0.5) = +(0.7 \times 0.5) = +0.35 \\
57 \quad & (-3.8) \times (-1.4) = +(3.8 \times 1.4) = +5.32 \\
58 \quad & (-2.1) \times (-0.04) = +(2.1 \times 0.04) = +0.084 \\
59 \quad & (-1.2) \times \left(-\frac{5}{2}\right) = +\left(1.2 \times \frac{5}{2}\right) \\
& \quad \quad \quad = +\left(\frac{6}{5} \times \frac{5}{2}\right) \\
& \quad \quad \quad = +3 \\
60 \quad & \left(-\frac{11}{6}\right) \times (-1.8) = +\left(\frac{11}{6} \times 1.8\right) \\
& \quad \quad \quad = +\left(\frac{11}{6} \times \frac{9}{5}\right) \\
& \quad \quad \quad = +\frac{33}{10}
\end{aligned}$$

4 정수와 유리수의 곱셈과 나눗셈

14

부호가 다른 두 수의 곱셈

90쪽

- ① $-$, $-$, 9
- ② -2
- ③ -18

- ④ $-$, $-$, 5
- ⑤ -12
- ⑥ -16

91쪽

- ⑦ -10
- ⑧ -24
- ⑨ -14
- ⑩ -15
- ⑪ -48
- ⑫ 0

- ⑬ -32
- ⑭ -28
- ⑮ -64
- ⑯ -78
- ⑰ -230
- ⑱ 0

92쪽

① 계산 결과를 가분수 또는 기약분수로 나타내지 않아도 정답으로 인정합니다.

- ⑲ $-$, $-$, $\frac{15}{4}$
- ⑳ $-\frac{7}{2}$
- ㉑ -5
- ㉒ $-\frac{9}{2}$
- ㉓ 0

- ㉔ $-$, $-$, 6.4
- ㉕ -1.5
- ㉖ -1.8
- ㉗ -12.6
- ㉘ -8.48
- ㉙ 0

93쪽

① 계산 결과를 가분수 또는 기약분수로 나타내지 않아도 정답으로 인정합니다.

- ㉚ $-$, $-$, $\frac{25}{4}$
- ㉛ $-\frac{8}{7}$
- ㉜ $-\frac{1}{2}$
- ㉝ $-\frac{4}{3}$
- ㉞ 0

- ㉟ $-$, $-$, 14
- ㊱ -3.5
- ㊲ -0.6
- ㊳ -55.2
- ㊴ -10.82
- ㊵ 0

94쪽

① 계산 결과를 가분수 또는 기약분수로 나타내지 않아도 정답으로 인정합니다.

- ㊶ $-$, $-$, $\frac{21}{2}$
- ㊷ $-\frac{1}{6}$
- ㊸ $-\frac{1}{4}$
- ㊹ $-\frac{1}{2}$
- ㊺ $-\frac{2}{3}$

- ㊻ $-$, $-$, 3.33
- ㊼ -0.16
- ㊽ -24.64
- ㊾ -0.253
- ㊿ $-\frac{1}{5}$
- ㋀ $-\frac{31}{9}$

95쪽

① 계산 결과를 가분수 또는 기약분수로 나타내지 않아도 정답으로 인정합니다.

- ㋁ $-$, $-$, 3
- ㋂ $-\frac{7}{18}$
- ㋃ $-\frac{5}{3}$
- ㋄ $-\frac{24}{7}$
- ㋅ 0

- ㋆ $-$, $-$, 2.03
- ㋇ -0.82
- ㋈ -0.048
- ㋉ 0
- ㋊ $-\frac{1}{30}$
- ㋋ $-\frac{3}{5}$

② $(+1) \times (-2) = -(1 \times 2) = -2$

③ $(+6) \times (-3) = -(6 \times 3) = -18$

⑤ $(-3) \times (+4) = -(3 \times 4) = -12$

⑥ $(-2) \times (+8) = -(2 \times 8) = -16$

⑦ $(+5) \times (-2) = -(5 \times 2) = -10$

⑧ $(+4) \times (-6) = -(4 \times 6) = -24$

⑨ $(+7) \times (-2) = -(7 \times 2) = -14$

⑩ $(+3) \times (-5) = -(3 \times 5) = -15$

⑪ $(+12) \times (-4) = -(12 \times 4) = -48$

⑬ $(-4) \times (+8) = -(4 \times 8) = -32$

$$\begin{aligned}
14 \quad & (-7) \times (+4) = -(7 \times 4) = -28 \\
15 \quad & (-8) \times (+8) = -(8 \times 8) = -64 \\
16 \quad & (-6) \times (+13) = -(6 \times 13) = -78 \\
17 \quad & (-23) \times (+10) = -(23 \times 10) = -230 \\
20 \quad & \left(+\frac{1}{2}\right) \times (-7) = -\left(\frac{1}{2} \times 7\right) = -\frac{7}{2} \\
21 \quad & (+3) \times \left(-\frac{5}{3}\right) = -\left(3 \times \frac{5}{3}\right) = -5 \\
22 \quad & \left(+\frac{9}{14}\right) \times (-7) = -\left(\frac{9}{14} \times 7\right) = -\frac{9}{2} \\
25 \quad & (+0.3) \times (-5) = -(0.3 \times 5) = -1.5 \\
26 \quad & (+2) \times (-0.9) = -(2 \times 0.9) = -1.8 \\
27 \quad & (+6) \times (-2.1) = -(6 \times 2.1) = -12.6 \\
28 \quad & (+2.12) \times (-4) = -(2.12 \times 4) = -8.48 \\
31 \quad & (-8) \times \left(+\frac{1}{7}\right) = -\left(8 \times \frac{1}{7}\right) = -\frac{8}{7} \\
32 \quad & \left(-\frac{1}{4}\right) \times (+2) = -\left(\frac{1}{4} \times 2\right) = -\frac{1}{2} \\
33 \quad & \left(-\frac{2}{9}\right) \times (+6) = -\left(\frac{2}{9} \times 6\right) = -\frac{4}{3} \\
36 \quad & (-0.5) \times (+7) = -(0.5 \times 7) = -3.5 \\
37 \quad & (-3) \times (+0.2) = -(3 \times 0.2) = -0.6 \\
38 \quad & (-6.9) \times (+8) = -(6.9 \times 8) = -55.2 \\
39 \quad & (-2) \times (+5.41) = -(2 \times 5.41) = -10.82 \\
42 \quad & \left(+\frac{1}{3}\right) \times \left(-\frac{1}{2}\right) = -\left(\frac{1}{3} \times \frac{1}{2}\right) = -\frac{1}{6} \\
43 \quad & \left(+\frac{1}{5}\right) \times \left(-\frac{5}{4}\right) = -\left(\frac{1}{5} \times \frac{5}{4}\right) = -\frac{1}{4} \\
44 \quad & \left(+\frac{7}{6}\right) \times \left(-\frac{3}{7}\right) = -\left(\frac{7}{6} \times \frac{3}{7}\right) = -\frac{1}{2}
\end{aligned}$$

$$\begin{aligned}
45 \quad & \left(+\frac{4}{27}\right) \times \left(-\frac{9}{2}\right) = -\left(\frac{4}{27} \times \frac{9}{2}\right) = -\frac{2}{3} \\
47 \quad & (+0.4) \times (-0.4) = -(0.4 \times 0.4) = -0.16 \\
48 \quad & (+7.7) \times (-3.2) = -(7.7 \times 3.2) = -24.64 \\
49 \quad & (+0.23) \times (-1.1) = -(0.23 \times 1.1) = -0.253 \\
50 \quad & \left(+\frac{2}{5}\right) \times (-0.5) = -\left(\frac{2}{5} \times 0.5\right) \\
& \quad \quad \quad = -\left(\frac{2}{5} \times \frac{1}{2}\right) \\
& \quad \quad \quad = -\frac{1}{5} \\
51 \quad & (+3.1) \times \left(-\frac{10}{9}\right) = -\left(3.1 \times \frac{10}{9}\right) \\
& \quad \quad \quad = -\left(\frac{31}{10} \times \frac{10}{9}\right) \\
& \quad \quad \quad = -\frac{31}{9} \\
53 \quad & \left(-\frac{7}{9}\right) \times \left(+\frac{1}{2}\right) = -\left(\frac{7}{9} \times \frac{1}{2}\right) = -\frac{7}{18} \\
54 \quad & \left(-\frac{8}{3}\right) \times \left(+\frac{5}{8}\right) = -\left(\frac{8}{3} \times \frac{5}{8}\right) = -\frac{5}{3} \\
55 \quad & \left(-\frac{16}{5}\right) \times \left(+\frac{15}{14}\right) = -\left(\frac{16}{5} \times \frac{15}{14}\right) = -\frac{24}{7} \\
58 \quad & (-4.1) \times (+0.2) = -(4.1 \times 0.2) = -0.82 \\
59 \quad & (-0.08) \times (+0.6) = -(0.08 \times 0.6) = -0.048 \\
61 \quad & (-0.1) \times \left(+\frac{1}{3}\right) = -\left(0.1 \times \frac{1}{3}\right) \\
& \quad \quad \quad = -\left(\frac{1}{10} \times \frac{1}{3}\right) \\
& \quad \quad \quad = -\frac{1}{30} \\
62 \quad & \left(-\frac{3}{4}\right) \times (+0.8) = -\left(\frac{3}{4} \times 0.8\right) \\
& \quad \quad \quad = -\left(\frac{3}{4} \times \frac{4}{5}\right) \\
& \quad \quad \quad = -\frac{3}{5}
\end{aligned}$$

4 정수와 유리수의 곱셈과 나눗셈

15 곱셈의 계산 법칙

96쪽

- | | |
|------------------|------------------------------------|
| ① $-8 \div -8$ | ③ $+\frac{2}{3} \div +\frac{2}{3}$ |
| ② $+30 \div +30$ | ④ $-1.05 \div -1.05$ |

97쪽

- | | |
|---|---|
| ⑤ $+3, +3, +15,$
$-105 \div$ 교환, 결합 | ⑦ $+\frac{5}{3}, +\frac{5}{3},$
$+1, -\frac{1}{4}$
$\div$ 곱셈의 교환법칙,
곱셈의 결합법칙 |
| ⑥ $-5, -5,$
$+20, +40$
$\div$ 곱셈의 교환법칙,
곱셈의 결합법칙 | ⑧ $+2, +2, +10, -1$
$\div$ 곱셈의 교환법칙,
곱셈의 결합법칙 |

98쪽

- | | |
|----------|----------|
| ⑨ -140 | ⑮ -81 |
| ⑩ -18 | ⑯ $+170$ |
| ⑪ $+12$ | ⑰ -270 |
| ⑫ $+64$ | ⑱ -350 |
| ⑬ $+120$ | ⑲ $+105$ |
| ⑭ -90 | ⑳ -24 |

99쪽 ❶ 계산 결과를 가분수 또는 기약분수로 나타내지 않아도 정답으로 인정합니다.

- | | |
|-------------------|-----------|
| ⑲ -3 | ⑳ $+13$ |
| ㉑ $-\frac{45}{2}$ | ㉒ -1.4 |
| ㉓ $-\frac{50}{3}$ | ㉔ $+3.6$ |
| ㉕ $-\frac{11}{3}$ | ㉖ $+21$ |
| ㉗ $+\frac{7}{4}$ | ㉘ $+48.8$ |
| | ㉙ -0.52 |

100쪽 ❶ 계산 결과를 가분수 또는 기약분수로 나타내지 않아도 정답으로 인정합니다.

- | | |
|-------------------|--------------------|
| ㉚ $-\frac{1}{21}$ | ㉛ $-\frac{1}{15}$ |
| ㉜ $+\frac{1}{35}$ | ㉝ $+\frac{30}{13}$ |
| ㉞ $+\frac{1}{11}$ | ㉟ $+\frac{1}{10}$ |
| ㊱ $-\frac{3}{2}$ | ㊲ $-\frac{10}{21}$ |
| ㊳ $-\frac{1}{9}$ | ㊴ $-\frac{4}{19}$ |

101쪽 ❶ 계산 결과를 가분수 또는 기약분수로 나타내지 않아도 정답으로 인정합니다.

- | | |
|------------|-------------------|
| ㊵ $+0.11$ | ㊶ -3.2 |
| ㊷ -0.21 | ㊸ -1.8 |
| ㊹ $+0.208$ | ㊺ $+10$ |
| ㊻ -0.84 | ㊼ $+1$ |
| ㊽ $+2.46$ | ㊾ $-\frac{5}{2}$ |
| ㊿ -0.214 | ㋀ $-\frac{10}{9}$ |

- $(-2) \times (+4) = -(2 \times 4) = -8$
곱셈의 교환법칙에 의하여
 $(+4) \times (-2) = (-2) \times (+4) = -8$
- $(-6) \times (-5) = +(6 \times 5) = +30$
곱셈의 교환법칙에 의하여
 $(-5) \times (-6) = (-6) \times (-5) = +30$
- $\left(+\frac{4}{9}\right) \times \left(+\frac{3}{2}\right) = +\left(\frac{4}{9} \times \frac{3}{2}\right) = +\frac{2}{3}$
곱셈의 교환법칙에 의하여
 $\left(+\frac{3}{2}\right) \times \left(+\frac{4}{9}\right) = \left(+\frac{4}{9}\right) \times \left(+\frac{3}{2}\right) = +\frac{2}{3}$
- $(+0.5) \times (-2.1) = -(0.5 \times 2.1) = -1.05$
곱셈의 교환법칙에 의하여
 $(-2.1) \times (+0.5) = (+0.5) \times (-2.1) = -1.05$
- $(+4) \times (-7) \times (+5) = (+4) \times (+5) \times (-7)$
 $= \{(+4) \times (+5)\} \times (-7)$
 $= (+20) \times (-7)$
 $= -140$

$$\begin{aligned} ⑩ (+1) \times (-9) \times (+2) &= (+1) \times (+2) \times (-9) \\ &= \{(+1) \times (+2)\} \times (-9) \\ &= (+2) \times (-9) \\ &= -18 \end{aligned}$$

$$\begin{aligned} ⑪ (-3) \times (+2) \times (-2) &= (-3) \times (-2) \times (+2) \\ &= \{(-3) \times (-2)\} \times (+2) \\ &= (+6) \times (+2) \\ &= +12 \end{aligned}$$

$$\begin{aligned} ⑫ (-2) \times (+8) \times (-4) &= (-2) \times (-4) \times (+8) \\ &= \{(-2) \times (-4)\} \times (+8) \\ &= (+8) \times (+8) \\ &= +64 \end{aligned}$$

$$\begin{aligned} ⑬ (-8) \times (+3) \times (-5) &= (-8) \times (-5) \times (+3) \\ &= \{(-8) \times (-5)\} \times (+3) \\ &= (+40) \times (+3) \\ &= +120 \end{aligned}$$

$$\begin{aligned} ⑭ (+15) \times (-3) \times (+2) &= (+15) \times (+2) \times (-3) \\ &= \{(+15) \times (+2)\} \times (-3) \\ &= (+30) \times (-3) \\ &= -90 \end{aligned}$$

$$\begin{aligned} ⑮ (+3) \times (-9) \times (+3) &= (+3) \times (+3) \times (-9) \\ &= \{(+3) \times (+3)\} \times (-9) \\ &= (+9) \times (-9) \\ &= -81 \end{aligned}$$

$$\begin{aligned} ⑯ (-5) \times (+17) \times (-2) &= (-5) \times (-2) \times (+17) \\ &= \{(-5) \times (-2)\} \times (+17) \\ &= (+10) \times (+17) \\ &= +170 \end{aligned}$$

$$\begin{aligned} ⑰ (+2) \times (-9) \times (+15) &= (+2) \times (+15) \times (-9) \\ &= \{(+2) \times (+15)\} \times (-9) \\ &= (+30) \times (-9) \\ &= -270 \end{aligned}$$

$$\begin{aligned} ⑱ (+25) \times (-7) \times (+2) &= (+25) \times (+2) \times (-7) \\ &= \{(+25) \times (+2)\} \times (-7) \\ &= (+50) \times (-7) \\ &= -350 \end{aligned}$$

$$\begin{aligned} ⑲ (-5) \times 3 \times (-7) &= (-5) \times (-7) \times 3 \\ &= \{(-5) \times (-7)\} \times 3 \\ &= (+35) \times 3 = +105 \end{aligned}$$

$$\begin{aligned} ⑳ 8 \times (-1) \times 3 &= 8 \times 3 \times (-1) \\ &= (8 \times 3) \times (-1) \\ &= 24 \times (-1) = -24 \end{aligned}$$

$$\begin{aligned} ㉑ (-2) \times \left(-\frac{1}{4}\right) \times (-6) \\ &= (-2) \times (-6) \times \left(-\frac{1}{4}\right) \\ &= \{(-2) \times (-6)\} \times \left(-\frac{1}{4}\right) \\ &= (+12) \times \left(-\frac{1}{4}\right) \\ &= -3 \end{aligned}$$

$$\begin{aligned} ㉒ (+3) \times \left(+\frac{3}{2}\right) \times (-5) \\ &= (+3) \times (-5) \times \left(+\frac{3}{2}\right) \\ &= \{(+3) \times (-5)\} \times \left(+\frac{3}{2}\right) \\ &= (-15) \times \left(+\frac{3}{2}\right) \\ &= -\frac{45}{2} \end{aligned}$$

$$\begin{aligned} ㉓ \left(+\frac{5}{7}\right) \times \left(-\frac{5}{3}\right) \times (+14) \\ &= \left(+\frac{5}{7}\right) \times (+14) \times \left(-\frac{5}{3}\right) \\ &= \left\{\left(+\frac{5}{7}\right) \times (+14)\right\} \times \left(-\frac{5}{3}\right) \\ &= (+10) \times \left(-\frac{5}{3}\right) \\ &= -\frac{50}{3} \end{aligned}$$

$$\begin{aligned} ㉔ (-5) \times \left(+\frac{1}{3}\right) \times \left(+\frac{11}{5}\right) \\ &= (-5) \times \left(+\frac{11}{5}\right) \times \left(+\frac{1}{3}\right) \\ &= \left\{(-5) \times \left(+\frac{11}{5}\right)\right\} \times \left(+\frac{1}{3}\right) \\ &= (-11) \times \left(+\frac{1}{3}\right) \\ &= -\frac{11}{3} \end{aligned}$$

4 정수와 유리수의 곱셈과 나눗셈

$$\begin{aligned}
 25 \quad & \left(-\frac{3}{10}\right) \times (-7) \times \left(+\frac{5}{6}\right) \\
 &= \left(-\frac{3}{10}\right) \times \left(+\frac{5}{6}\right) \times (-7) \\
 &= \left[\left(-\frac{3}{10}\right) \times \left(+\frac{5}{6}\right)\right] \times (-7) \\
 &= \left(-\frac{1}{4}\right) \times (-7) \\
 &= +\frac{7}{4}
 \end{aligned}$$

$$\begin{aligned}
 26 \quad & (-0.2) \times (+13) \times (-5) \\
 &= (-0.2) \times (-5) \times (+13) \\
 &= \{(-0.2) \times (-5)\} \times (+13) \\
 &= (+1) \times (+13) \\
 &= +13
 \end{aligned}$$

$$\begin{aligned}
 27 \quad & (+0.5) \times (+1.4) \times (-2) \\
 &= (+0.5) \times (-2) \times (+1.4) \\
 &= \{(+0.5) \times (-2)\} \times (+1.4) \\
 &= (-1) \times (+1.4) \\
 &= -1.4
 \end{aligned}$$

$$\begin{aligned}
 28 \quad & (+4) \times (-0.9) \times (-1) \\
 &= (+4) \times (-1) \times (-0.9) \\
 &= \{(+4) \times (-1)\} \times (-0.9) \\
 &= (-4) \times (-0.9) \\
 &= +3.6
 \end{aligned}$$

$$\begin{aligned}
 29 \quad & (-15) \times (+0.7) \times (-2) \\
 &= (-15) \times (-2) \times (+0.7) \\
 &= \{(-15) \times (-2)\} \times (+0.7) \\
 &= (+30) \times (+0.7) \\
 &= +21
 \end{aligned}$$

$$\begin{aligned}
 30 \quad & (-2) \times (+12.2) \times (-2) \\
 &= (-2) \times (-2) \times (+12.2) \\
 &= \{(-2) \times (-2)\} \times (+12.2) \\
 &= (+4) \times (+12.2) \\
 &= +48.8
 \end{aligned}$$

$$\begin{aligned}
 31 \quad & (+2.6) \times (-0.02) \times (+10) \\
 &= (+2.6) \times (+10) \times (-0.02) \\
 &= \{(+2.6) \times (+10)\} \times (-0.02) \\
 &= (+26) \times (-0.02) \\
 &= -0.52
 \end{aligned}$$

$$\begin{aligned}
 32 \quad & \left(+\frac{1}{2}\right) \times \left(-\frac{1}{3}\right) \times \left(+\frac{2}{7}\right) \\
 &= \left(+\frac{1}{2}\right) \times \left(+\frac{2}{7}\right) \times \left(-\frac{1}{3}\right) \\
 &= \left[\left(+\frac{1}{2}\right) \times \left(+\frac{2}{7}\right)\right] \times \left(-\frac{1}{3}\right) \\
 &= \left(+\frac{1}{7}\right) \times \left(-\frac{1}{3}\right) = -\frac{1}{21}
 \end{aligned}$$

$$\begin{aligned}
 33 \quad & \left(-\frac{1}{6}\right) \times \left(-\frac{1}{5}\right) \times \left(+\frac{6}{7}\right) \\
 &= \left(-\frac{1}{6}\right) \times \left(+\frac{6}{7}\right) \times \left(-\frac{1}{5}\right) \\
 &= \left[\left(-\frac{1}{6}\right) \times \left(+\frac{6}{7}\right)\right] \times \left(-\frac{1}{5}\right) \\
 &= \left(-\frac{1}{7}\right) \times \left(-\frac{1}{5}\right) = +\frac{1}{35}
 \end{aligned}$$

$$\begin{aligned}
 34 \quad & \left(+\frac{3}{8}\right) \times \left(-\frac{1}{11}\right) \times \left(-\frac{8}{3}\right) \\
 &= \left(+\frac{3}{8}\right) \times \left(-\frac{8}{3}\right) \times \left(-\frac{1}{11}\right) \\
 &= \left[\left(+\frac{3}{8}\right) \times \left(-\frac{8}{3}\right)\right] \times \left(-\frac{1}{11}\right) \\
 &= (-1) \times \left(-\frac{1}{11}\right) = +\frac{1}{11}
 \end{aligned}$$

$$\begin{aligned}
 35 \quad & \left(-\frac{4}{5}\right) \times \left(+\frac{3}{2}\right) \times \left(+\frac{5}{4}\right) \\
 &= \left(-\frac{4}{5}\right) \times \left(+\frac{5}{4}\right) \times \left(+\frac{3}{2}\right) \\
 &= \left[\left(-\frac{4}{5}\right) \times \left(+\frac{5}{4}\right)\right] \times \left(+\frac{3}{2}\right) \\
 &= (-1) \times \left(+\frac{3}{2}\right) = -\frac{3}{2}
 \end{aligned}$$

$$\begin{aligned}
 36 \quad & \left(+\frac{2}{5}\right) \times \left(-\frac{1}{3}\right) \times \left(+\frac{5}{6}\right) \\
 &= \left(+\frac{2}{5}\right) \times \left(+\frac{5}{6}\right) \times \left(-\frac{1}{3}\right) \\
 &= \left[\left(+\frac{2}{5}\right) \times \left(+\frac{5}{6}\right)\right] \times \left(-\frac{1}{3}\right) \\
 &= \left(+\frac{1}{3}\right) \times \left(-\frac{1}{3}\right) = -\frac{1}{9}
 \end{aligned}$$

$$\begin{aligned}
37 \quad & \left(+\frac{3}{4}\right) \times \left(+\frac{1}{5}\right) \times \left(-\frac{4}{9}\right) \\
& = \left(+\frac{3}{4}\right) \times \left(-\frac{4}{9}\right) \times \left(+\frac{1}{5}\right) \\
& = \left\{\left(+\frac{3}{4}\right) \times \left(-\frac{4}{9}\right)\right\} \times \left(+\frac{1}{5}\right) \\
& = \left(-\frac{1}{3}\right) \times \left(+\frac{1}{5}\right) = -\frac{1}{15}
\end{aligned}$$

$$\begin{aligned}
38 \quad & \left(+\frac{9}{4}\right) \times \left(+\frac{5}{13}\right) \times \left(+\frac{8}{3}\right) \\
& = \left(+\frac{9}{4}\right) \times \left(+\frac{8}{3}\right) \times \left(+\frac{5}{13}\right) \\
& = \left\{\left(+\frac{9}{4}\right) \times \left(+\frac{8}{3}\right)\right\} \times \left(+\frac{5}{13}\right) \\
& = (+6) \times \left(+\frac{5}{13}\right) = +\frac{30}{13}
\end{aligned}$$

$$\begin{aligned}
39 \quad & \left(-\frac{7}{8}\right) \times \left(+\frac{1}{5}\right) \times \left(-\frac{4}{7}\right) \\
& = \left(-\frac{7}{8}\right) \times \left(-\frac{4}{7}\right) \times \left(+\frac{1}{5}\right) \\
& = \left\{\left(-\frac{7}{8}\right) \times \left(-\frac{4}{7}\right)\right\} \times \left(+\frac{1}{5}\right) \\
& = \left(+\frac{1}{2}\right) \times \left(+\frac{1}{5}\right) = +\frac{1}{10}
\end{aligned}$$

$$\begin{aligned}
40 \quad & \left(+\frac{9}{2}\right) \times \left(-\frac{5}{7}\right) \times \left(+\frac{4}{27}\right) \\
& = \left(+\frac{9}{2}\right) \times \left(+\frac{4}{27}\right) \times \left(-\frac{5}{7}\right) \\
& = \left\{\left(+\frac{9}{2}\right) \times \left(+\frac{4}{27}\right)\right\} \times \left(-\frac{5}{7}\right) \\
& = \left(+\frac{2}{3}\right) \times \left(-\frac{5}{7}\right) = -\frac{10}{21}
\end{aligned}$$

$$\begin{aligned}
41 \quad & \left(-\frac{7}{9}\right) \times \left(-\frac{12}{19}\right) \times \left(-\frac{3}{7}\right) \\
& = \left(-\frac{7}{9}\right) \times \left(-\frac{3}{7}\right) \times \left(-\frac{12}{19}\right) \\
& = \left\{\left(-\frac{7}{9}\right) \times \left(-\frac{3}{7}\right)\right\} \times \left(-\frac{12}{19}\right) \\
& = \left(+\frac{1}{3}\right) \times \left(-\frac{12}{19}\right) = -\frac{4}{19}
\end{aligned}$$

$$\begin{aligned}
42 \quad & (-0.5) \times (+1.1) \times (-0.2) \\
& = (-0.5) \times (-0.2) \times (+1.1) \\
& = \{(-0.5) \times (-0.2)\} \times (+1.1) \\
& = (+0.1) \times (+1.1) \\
& = +0.11
\end{aligned}$$

$$\begin{aligned}
43 \quad & (+1.5) \times (-0.7) \times (+0.2) \\
& = (+1.5) \times (+0.2) \times (-0.7) \\
& = \{(+1.5) \times (+0.2)\} \times (-0.7) \\
& = (+0.3) \times (-0.7) \\
& = -0.21
\end{aligned}$$

$$\begin{aligned}
44 \quad & (-0.4) \times (+5.2) \times (-0.1) \\
& = (-0.4) \times (-0.1) \times (+5.2) \\
& = \{(-0.4) \times (-0.1)\} \times (+5.2) \\
& = (+0.04) \times (+5.2) \\
& = +0.208
\end{aligned}$$

$$\begin{aligned}
45 \quad & (+0.8) \times (+2.1) \times (-0.5) \\
& = (+0.8) \times (-0.5) \times (+2.1) \\
& = \{(+0.8) \times (-0.5)\} \times (+2.1) \\
& = (-0.4) \times (+2.1) \\
& = -0.84
\end{aligned}$$

$$\begin{aligned}
46 \quad & (-2.5) \times (+1.23) \times (-0.8) \\
& = (-2.5) \times (-0.8) \times (+1.23) \\
& = \{(-2.5) \times (-0.8)\} \times (+1.23) \\
& = (+2) \times (+1.23) \\
& = +2.46
\end{aligned}$$

$$\begin{aligned}
47 \quad & (+0.4) \times (-10.7) \times (+0.05) \\
& = (+0.4) \times (+0.05) \times (-10.7) \\
& = \{(+0.4) \times (+0.05)\} \times (-10.7) \\
& = (+0.02) \times (-10.7) \\
& = -0.214
\end{aligned}$$

$$\begin{aligned}
48 \quad & (+3) \times (-1.6) \times \left(+\frac{2}{3}\right) \\
& = (+3) \times \left(+\frac{2}{3}\right) \times (-1.6) \\
& = \left\{(+3) \times \left(+\frac{2}{3}\right)\right\} \times (-1.6) \\
& = (+2) \times (-1.6) \\
& = -3.2
\end{aligned}$$

4 정수와 유리수의 곱셈과 나눗셈

$$\begin{aligned}
 49 \quad & \left(-\frac{1}{7}\right) \times (+0.3) \times (+42) \\
 &= \left(-\frac{1}{7}\right) \times (+42) \times (+0.3) \\
 &= \left\{\left(-\frac{1}{7}\right) \times (+42)\right\} \times (+0.3) \\
 &= (-6) \times (+0.3) \\
 &= -1.8
 \end{aligned}$$

$$\begin{aligned}
 50 \quad & (+10) \times \left(-\frac{5}{3}\right) \times (-0.6) \\
 &= (+10) \times (-0.6) \times \left(-\frac{5}{3}\right) \\
 &= \{(+10) \times (-0.6)\} \times \left(-\frac{5}{3}\right) \\
 &= (-6) \times \left(-\frac{5}{3}\right) \\
 &= +10
 \end{aligned}$$

$$\begin{aligned}
 51 \quad & (-1.2) \times \left(-\frac{1}{6}\right) \times (+5) \\
 &= (-1.2) \times (+5) \times \left(-\frac{1}{6}\right) \\
 &= \{(-1.2) \times (+5)\} \times \left(-\frac{1}{6}\right) \\
 &= (-6) \times \left(-\frac{1}{6}\right) \\
 &= +1
 \end{aligned}$$

$$\begin{aligned}
 52 \quad & (-0.6) \times \left(-\frac{5}{18}\right) \times (-15) \\
 &= (-0.6) \times (-15) \times \left(-\frac{5}{18}\right) \\
 &= \{(-0.6) \times (-15)\} \times \left(-\frac{5}{18}\right) \\
 &= (+9) \times \left(-\frac{5}{18}\right) \\
 &= -\frac{5}{2}
 \end{aligned}$$

$$\begin{aligned}
 53 \quad & (+20) \times \left(-\frac{2}{9}\right) \times (+0.25) \\
 &= (+20) \times (+0.25) \times \left(-\frac{2}{9}\right) \\
 &= \{(+20) \times (+0.25)\} \times \left(-\frac{2}{9}\right) \\
 &= (+5) \times \left(-\frac{2}{9}\right) \\
 &= -\frac{10}{9}
 \end{aligned}$$

16

세 수 이상의 곱셈 / 거듭제곱의 계산 /
분배법칙

102쪽

- | | |
|------------|--------|
| ① +, +, 60 | ③ + 70 |
| ② - 27 | ④ - 96 |

103쪽

① 계산 결과를 가분수 또는 기약분수로 나타내지 않아도 정답으로 인정합니다.

- | | |
|------------------------|--------------------|
| ⑤ -, -, $\frac{10}{3}$ | ⑩ + $\frac{1}{15}$ |
| ⑥ + 64 | ⑪ - $\frac{1}{2}$ |
| ⑦ + 18 | ⑫ - $\frac{1}{2}$ |
| ⑧ - 3.9 | ⑬ - 0.14 |
| ⑨ - 18 | ⑭ + 1.26 |
| | ⑮ + $\frac{8}{5}$ |

104쪽

- | | |
|--------------------|---------|
| ⑯ -, -, 27 | ⑳ -, 81 |
| ⑰ + 64 | ㉑ - 25 |
| ⑱ + 256 | ㉒ - 1 |
| ㉓ - $\frac{1}{32}$ | ㉔ - 1 |

105쪽

① 계산 결과를 가분수 또는 기약분수로 나타내지 않아도 정답으로 인정합니다.

- | | |
|---------|--------------------|
| ㉕ + 98 | ㉚ - $\frac{1}{24}$ |
| ㉖ + 192 | ㉛ - 36 |
| ㉗ + 108 | ㉜ + 32 |
| ㉘ - 36 | ㉝ - 27 |
| ㉙ - 64 | ㉞ - $\frac{4}{3}$ |
| ㉟ - 25 | ㉟ - 1 |

106쪽

36 100, 3, 1236

37 2525

38 1568

39 -216

40 6, 240

41 -2700

42 200

43 400

107쪽

44 3

45 2

46 -11

47 -14

48 -1

49 -19

50 178

51 -20

52 52

53 98

54 -30

55 2

2 $(-1) \times (+3) \times (+9) = -(1 \times 3 \times 9) = -27$

3 $(-7) \times (+2) \times (-5) = +(7 \times 2 \times 5) = +70$

4 $(+2) \times (-4) \times (-2) \times (-6)$
 $= -(2 \times 4 \times 2 \times 6)$
 $= -96$

6 $(-4) \times \left(+\frac{8}{3}\right) \times (-6) = +\left(4 \times \frac{8}{3} \times 6\right) = +64$

7 $(+6) \times (-1.5) \times (-2) = +(6 \times 1.5 \times 2) = +18$

8 $(-0.3) \times (-10) \times (-1.3) = -(0.3 \times 10 \times 1.3)$
 $= -3.9$

9 $(-12) \times \left(+\frac{1}{4}\right) \times (-4) \times \left(-\frac{3}{2}\right)$
 $= -\left(12 \times \frac{1}{4} \times 4 \times \frac{3}{2}\right)$
 $= -18$

10 $\left(-\frac{1}{2}\right) \times \left(-\frac{2}{3}\right) \times \left(+\frac{1}{5}\right) = +\left(\frac{1}{2} \times \frac{2}{3} \times \frac{1}{5}\right)$
 $= +\frac{1}{15}$

11 $\left(+\frac{3}{5}\right) \times \left(+\frac{1}{4}\right) \times \left(-\frac{10}{3}\right) = -\left(\frac{3}{5} \times \frac{1}{4} \times \frac{10}{3}\right)$
 $= -\frac{1}{2}$

12 $\left(-\frac{2}{7}\right) \times \left(+\frac{35}{12}\right) \times \left(+\frac{3}{5}\right) = -\left(\frac{2}{7} \times \frac{35}{12} \times \frac{3}{5}\right)$
 $= -\frac{1}{2}$

13 $(-1.4) \times (-0.2) \times (-0.5) = -(1.4 \times 0.2 \times 0.5)$
 $= -0.14$

14 $(+2.1) \times (-1.5) \times (-0.4) = +(2.1 \times 1.5 \times 0.4)$
 $= +1.26$

15 $\left(+\frac{2}{9}\right) \times \left(-\frac{7}{3}\right) \times \left(-\frac{18}{7}\right) \times \left(+\frac{6}{5}\right)$
 $= +\left(\frac{2}{9} \times \frac{7}{3} \times \frac{18}{7} \times \frac{6}{5}\right)$
 $= +\frac{8}{5}$

17 $(+2)^6 = +(2 \times 2 \times 2 \times 2 \times 2 \times 2) = +64$

18 $(-4)^4 = +(4 \times 4 \times 4 \times 4) = +256$

19 $\left(-\frac{1}{2}\right)^5 = -\left(\frac{1}{2} \times \frac{1}{2} \times \frac{1}{2} \times \frac{1}{2} \times \frac{1}{2}\right) = -\frac{1}{32}$

21 $-5^2 = -(5 \times 5) = -25$

22 $(-1)^{99} = -(\underbrace{1 \times 1 \times \cdots \times 1}_{1 \text{ 이 } 99 \text{ 개}}) = -1$

23 $-1^{100} = -(\underbrace{1 \times 1 \times \cdots \times 1}_{1 \text{ 이 } 100 \text{ 개}}) = -1$

24 $2 \times (-7)^2 = 2 \times (+49) = +98$

25 $-6 \times (-2)^5 = -6 \times (-32) = +192$

26 $(+3)^3 \times (-2)^2 = (+27) \times (+4) = +108$

27 $-2^2 \times (-3)^2 = -4 \times (+9) = -36$

28 $(-1)^8 \times (-4)^3 = (+1) \times (-64) = -64$

29 $(-5)^2 \times (-1)^{49} = (+25) \times (-1) = -25$

30 $(+3)^2 \times \left(-\frac{1}{6}\right)^3 = (+9) \times \left(-\frac{1}{216}\right) = -\frac{1}{24}$

4 정수와 유리수의 곱셈과 나눗셈

$$\textcircled{31} \left(-\frac{2}{3}\right)^2 \times (-9^2) = \left(+\frac{4}{9}\right) \times (-81) = -36$$

$$\textcircled{32} (-4)^2 \times (-1)^3 \times (-2) = (+16) \times (-1) \times (-2) = +32$$

$$\textcircled{33} -5^2 \times \left(-\frac{3}{5}\right)^2 \times (+3) = -25 \times \left(+\frac{9}{25}\right) \times (+3) = -27$$

$$\begin{aligned} \textcircled{34} & \left(-\frac{3}{4}\right)^2 \times (-2)^3 \times \left(+\frac{2}{3}\right)^3 \\ & = \left(+\frac{9}{16}\right) \times (-8) \times \left(+\frac{8}{27}\right) \\ & = -\frac{4}{3} \end{aligned}$$

$$\begin{aligned} \textcircled{35} & (-1)^3 \times (-1^{50}) \times (-1)^{48} \times (-1^2) \\ & = (-1) \times (-1) \times (+1) \times (-1) \\ & = -1 \end{aligned}$$

$$\begin{aligned} \textcircled{37} & 25 \times (100 + 1) = 25 \times 100 + 25 \times 1 \\ & = 2500 + 25 \\ & = 2525 \end{aligned}$$

$$\begin{aligned} \textcircled{38} & (100 - 2) \times 16 = 100 \times 16 - 2 \times 16 \\ & = 1600 - 32 \\ & = 1568 \end{aligned}$$

$$\begin{aligned} \textcircled{39} & (50 + 4) \times (-4) = 50 \times (-4) + 4 \times (-4) \\ & = (-200) + (-16) \\ & = -216 \end{aligned}$$

$$\begin{aligned} \textcircled{41} & (-27) \times 98 + (-27) \times 2 = (-27) \times (98 + 2) \\ & = (-27) \times 100 \\ & = -2700 \end{aligned}$$

$$\textcircled{42} 22 \times 4 + 28 \times 4 = (22 + 28) \times 4 = 50 \times 4 = 200$$

$$\textcircled{43} 76 \times 8 - 26 \times 8 = (76 - 26) \times 8 = 50 \times 8 = 400$$

$$\textcircled{44} 6 \times \left(\frac{1}{3} + \frac{1}{6}\right) = 6 \times \frac{1}{3} + 6 \times \frac{1}{6} = 2 + 1 = 3$$

$$\textcircled{45} 8 \times \left(\frac{3}{2} - \frac{5}{4}\right) = 8 \times \frac{3}{2} - 8 \times \frac{5}{4} = 12 - 10 = 2$$

$$\begin{aligned} \textcircled{46} & (-20) \times \left\{\frac{7}{4} + \left(-\frac{6}{5}\right)\right\} \\ & = (-20) \times \frac{7}{4} + (-20) \times \left(-\frac{6}{5}\right) \\ & = (-35) + (+24) \\ & = -11 \end{aligned}$$

$$\begin{aligned} \textcircled{47} & \left(\frac{2}{3} + \frac{1}{2}\right) \times (-12) = \frac{2}{3} \times (-12) + \frac{1}{2} \times (-12) \\ & = (-8) + (-6) \\ & = -14 \end{aligned}$$

$$\begin{aligned} \textcircled{48} & \left\{\left(-\frac{1}{2}\right) + \frac{3}{7}\right\} \times 14 = \left(-\frac{1}{2}\right) \times 14 + \frac{3}{7} \times 14 \\ & = (-7) + 6 \\ & = -1 \end{aligned}$$

$$\begin{aligned} \textcircled{49} & \left(\frac{1}{8} - 0.6\right) \times 40 = \frac{1}{8} \times 40 - 0.6 \times 40 \\ & = 5 - 24 \\ & = -19 \end{aligned}$$

$$\begin{aligned} \textcircled{50} & 1.78 \times 32 + 1.78 \times 68 = 1.78 \times (32 + 68) \\ & = 1.78 \times 100 \\ & = 178 \end{aligned}$$

$$\begin{aligned} \textcircled{51} & \left(-\frac{2}{5}\right) \times 21 + \left(-\frac{2}{5}\right) \times 29 = \left(-\frac{2}{5}\right) \times (21 + 29) \\ & = \left(-\frac{2}{5}\right) \times 50 \\ & = -20 \end{aligned}$$

$$\begin{aligned} \textcircled{52} & 5.2 \times \frac{21}{2} - 5.2 \times \frac{1}{2} = 5.2 \times \left(\frac{21}{2} - \frac{1}{2}\right) \\ & = 5.2 \times 10 \\ & = 52 \end{aligned}$$

$$\begin{aligned} \textcircled{53} & 105 \times 0.98 - 5 \times 0.98 = (105 - 5) \times 0.98 \\ & = 100 \times 0.98 \\ & = 98 \end{aligned}$$

$$\begin{aligned} \textcircled{54} & (-31) \times \frac{5}{6} + (-5) \times \frac{5}{6} = \{(-31) + (-5)\} \times \frac{5}{6} \\ & = (-36) \times \frac{5}{6} \\ & = -30 \end{aligned}$$

$$\begin{aligned} \textcircled{55} & 4.6 \times \frac{2}{3} - 1.6 \times \frac{2}{3} = (4.6 - 1.6) \times \frac{2}{3} \\ & = 3 \times \frac{2}{3} \\ & = 2 \end{aligned}$$

108쪽

- ① $+, +, 2$
② $+4$

- ③ $+, +, 3$
④ $+4$

109쪽

- ⑤ $+3$
⑥ $+2$
⑦ $+5$
⑧ $+8$
⑨ $+3$
⑩ $+5$

- ⑪ $+6$
⑫ $+3$
⑬ $+2$
⑭ $+5$
⑮ $+13$
⑯ $+2$

110쪽

- ⑰ $+0.4$
⑱ $+0.3$
⑲ $+3.3$
⑳ $+0.28$
㉑ $+11$
㉒ $+40$

- ㉓ $+0.8$
㉔ $+0.8$
㉕ $+1.2$
㉖ $+0.07$
㉗ $+6$
㉘ $+60$

111쪽

- ㉙ $-, -, 2$
㉚ -3
㉛ 0

- ㉜ $-, -, 3$
㉝ -6
㉞ 0

112쪽

- ㉟ -9
㊱ -4
㊲ -5
㊳ -4
㊴ -3
㊵ -7

- ㊶ -5
㊷ -3
㊸ -8
㊹ -4
㊺ -13
㊻ -4

113쪽

- ㊼ -0.2
㊽ -0.7
㊾ -1.1
㊿ -2
㋀ -12
㋁ 0

- ㋂ -0.3
㋃ -1.3
㋄ -2.45
㋅ -9
㋆ -2.1
㋇ -70

$$② (+12) \div (+3) = +(12 \div 3) = +4$$

$$④ (-8) \div (-2) = +(8 \div 2) = +4$$

$$⑤ (+6) \div (+2) = +(6 \div 2) = +3$$

$$⑥ (+14) \div (+7) = +(14 \div 7) = +2$$

$$⑦ (+20) \div (+4) = +(20 \div 4) = +5$$

$$⑧ (+24) \div (+3) = +(24 \div 3) = +8$$

$$⑨ (+27) \div (+9) = +(27 \div 9) = +3$$

$$⑩ (+80) \div (+16) = +(80 \div 16) = +5$$

$$⑪ (-12) \div (-2) = +(12 \div 2) = +6$$

$$⑫ (-15) \div (-5) = +(15 \div 5) = +3$$

$$⑬ (-16) \div (-8) = +(16 \div 8) = +2$$

$$⑭ (-30) \div (-6) = +(30 \div 6) = +5$$

$$⑮ (-39) \div (-3) = +(39 \div 3) = +13$$

$$⑯ (-42) \div (-21) = +(42 \div 21) = +2$$

$$⑰ (+0.8) \div (+2) = +(0.8 \div 2) = +0.4$$

$$⑱ (+2.1) \div (+7) = +(2.1 \div 7) = +0.3$$

$$⑲ (+16.5) \div (+5) = +(16.5 \div 5) = +3.3$$

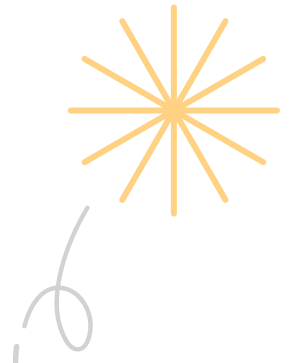
$$㉑ (+1.68) \div (+6) = +(1.68 \div 6) = +0.28$$

$$\begin{aligned} ㉒ (+2.2) \div (+0.2) &= +(2.2 \div 0.2) \\ &= +(22 \div 2) \\ &= +11 \end{aligned}$$

4 정수와 유리수의 곱셈과 나눗셈

- 22 $(+84) \div (+2.1) = +(84 \div 2.1)$
 $= +(840 \div 21)$
 $= +40$
- 23 $(-3.2) \div (-4) = +(3.2 \div 4) = +0.8$
- 24 $(-4.8) \div (-6) = +(4.8 \div 6) = +0.8$
- 25 $(-14.4) \div (-12) = +(14.4 \div 12) = +1.2$
- 26 $(-0.98) \div (-14) = +(0.98 \div 14) = +0.07$
- 27 $(-3.6) \div (-0.6) = +(3.6 \div 0.6)$
 $= +(36 \div 6)$
 $= +6$
- 28 $(-72) \div (-1.2) = +(72 \div 1.2)$
 $= +(720 \div 12)$
 $= +60$
- 30 $(+18) \div (-6) = -(18 \div 6) = -3$
- 33 $(-24) \div (+4) = -(24 \div 4) = -6$
- 35 $(+9) \div (-1) = -(9 \div 1) = -9$
- 36 $(+16) \div (-4) = -(16 \div 4) = -4$
- 37 $(+35) \div (-7) = -(35 \div 7) = -5$
- 38 $(+32) \div (-8) = -(32 \div 8) = -4$
- 39 $(+45) \div (-15) = -(45 \div 15) = -3$
- 40 $(+70) \div (-10) = -(70 \div 10) = -7$
- 41 $(-10) \div (+2) = -(10 \div 2) = -5$
- 42 $(-12) \div (+4) = -(12 \div 4) = -3$
- 43 $(-24) \div (+3) = -(24 \div 3) = -8$
- 44 $(-36) \div (+9) = -(36 \div 9) = -4$
- 45 $(-78) \div (+6) = -(78 \div 6) = -13$
- 46 $(-88) \div (+22) = -(88 \div 22) = -4$
- 47 $(+0.4) \div (-2) = -(0.4 \div 2) = -0.2$
- 48 $(+5.6) \div (-8) = -(5.6 \div 8) = -0.7$
- 49 $(+12.1) \div (-11) = -(12.1 \div 11) = -1.1$

- 50 $(+7.4) \div (-3.7) = -(7.4 \div 3.7)$
 $= -(74 \div 37)$
 $= -2$
- 51 $(+21.6) \div (-1.8) = -(21.6 \div 1.8)$
 $= -(216 \div 18)$
 $= -12$
- 53 $(-0.9) \div (+3) = -(0.9 \div 3) = -0.3$
- 54 $(-2.6) \div (+2) = -(2.6 \div 2) = -1.3$
- 55 $(-19.6) \div (+8) = -(19.6 \div 8) = -2.45$
- 56 $(-6.3) \div (+0.7) = -(6.3 \div 0.7)$
 $= -(63 \div 7)$
 $= -9$
- 57 $(-3.15) \div (+1.5) = -(3.15 \div 1.5)$
 $= -(31.5 \div 15)$
 $= -2.1$
- 58 $(-49) \div (+0.7) = -(49 \div 0.7)$
 $= -(490 \div 7)$
 $= -70$



114쪽

① $\frac{6}{5}$

② $\frac{1}{4}$

③ $-\frac{11}{3}$

④ $-\frac{10}{13}$

115쪽

⑤ $\frac{7}{3}$

⑥ $-\frac{4}{5}$

⑦ 5

⑧ -3

⑨ $\frac{1}{9}$

⑩ $\frac{1}{16}$

⑪ $-\frac{1}{8}$

⑫ $-\frac{1}{17}$

⑬ $\frac{2}{5}$

⑭ $-\frac{10}{37}$

⑮ $\frac{4}{9}$

⑯ $\frac{8}{15}$

116쪽 ① 계산 결과를 가분수 또는 기약분수로 나타내지 않아도 정답으로 인정합니다.

⑰ $-, \frac{4}{3}, +, \frac{4}{3},$

$+, \frac{8}{3}$

⑱ $+\frac{5}{2}$

⑲ $+, \frac{1}{3}, -, \frac{1}{3},$

$-, \frac{1}{9}$

⑳ $-\frac{2}{15}$

117쪽 ① 계산 결과를 가분수 또는 기약분수로 나타내지 않아도 정답으로 인정합니다.

㉑ $+\frac{1}{12}$

㉒ $+\frac{4}{21}$

㉓ $+\frac{1}{18}$

㉔ +6

㉕ $+\frac{15}{2}$

㉖ +18

㉗ $-\frac{5}{12}$

㉘ $-\frac{1}{10}$

㉙ $-\frac{1}{8}$

㉚ -48

㉛ $-\frac{3}{2}$

㉜ -28

118쪽

㉝ $+\frac{1}{2}$

㉞ +3

㉟ +1

㊱ +6

㊲ $+\frac{4}{5}$

㉡ $+\frac{3}{14}$

㉢ $+\frac{7}{12}$

㉣ $+\frac{21}{22}$

㉤ $+\frac{20}{21}$

㉥ $+\frac{1}{8}$

119쪽 ① 계산 결과를 가분수 또는 기약분수로 나타내지 않아도 정답으로 인정합니다.

㉦ -2

㉧ $-\frac{1}{2}$

㉨ $-\frac{5}{2}$

㉩ $-\frac{1}{6}$

㊰ $-\frac{10}{3}$

㉪ $-\frac{33}{14}$

㉬ $-\frac{13}{16}$

㉭ $-\frac{27}{8}$

㉮ $-\frac{3}{4}$

㉯ $-\frac{1}{12}$

⑬ $2.5 = \frac{5}{2}$ 이므로 2.5의 역수는 $\frac{2}{5}$ 입니다.

⑭ $-3.7 = -\frac{37}{10}$ 이므로 -3.7의 역수는 $-\frac{10}{37}$ 입니다.

⑮ $2\frac{1}{4} = \frac{9}{4}$ 이므로 $2\frac{1}{4}$ 의 역수는 $\frac{4}{9}$ 입니다.

⑯ $1\frac{7}{8} = \frac{15}{8}$ 이므로 $1\frac{7}{8}$ 의 역수는 $\frac{8}{15}$ 입니다.

⑰ $(+4) \div \left(+\frac{8}{5}\right) = (+4) \times \left(+\frac{5}{8}\right)$
 $= +\left(4 \times \frac{5}{8}\right) = +\frac{5}{2}$

⑳ $\left(+\frac{4}{5}\right) \div (-6) = \left(+\frac{4}{5}\right) \times \left(-\frac{1}{6}\right)$
 $= -\left(\frac{4}{5} \times \frac{1}{6}\right) = -\frac{2}{15}$

4 정수와 유리수의 곱셈과 나눗셈

$$\begin{aligned} 21 \quad \left(+\frac{1}{4}\right) \div (+3) &= \left(+\frac{1}{4}\right) \times \left(+\frac{1}{3}\right) \\ &= +\left(\frac{1}{4} \times \frac{1}{3}\right) \\ &= +\frac{1}{12} \end{aligned}$$

$$\begin{aligned} 22 \quad \left(-\frac{8}{7}\right) \div (-6) &= \left(-\frac{8}{7}\right) \times \left(-\frac{1}{6}\right) \\ &= +\left(\frac{8}{7} \times \frac{1}{6}\right) \\ &= +\frac{4}{21} \end{aligned}$$

$$\begin{aligned} 23 \quad \left(+\frac{5}{9}\right) \div (+10) &= \left(+\frac{5}{9}\right) \times \left(+\frac{1}{10}\right) \\ &= +\left(\frac{5}{9} \times \frac{1}{10}\right) \\ &= +\frac{1}{18} \end{aligned}$$

$$\begin{aligned} 24 \quad (-3) \div \left(-\frac{1}{2}\right) &= (-3) \times (-2) \\ &= +(3 \times 2) \\ &= +6 \end{aligned}$$

$$\begin{aligned} 25 \quad (-5) \div \left(-\frac{2}{3}\right) &= (-5) \times \left(-\frac{3}{2}\right) \\ &= +\left(5 \times \frac{3}{2}\right) \\ &= +\frac{15}{2} \end{aligned}$$

$$\begin{aligned} 26 \quad (+16) \div \left(+\frac{8}{9}\right) &= (+16) \times \left(+\frac{9}{8}\right) \\ &= +\left(16 \times \frac{9}{8}\right) \\ &= +18 \end{aligned}$$

$$\begin{aligned} 27 \quad \left(+\frac{5}{6}\right) \div (-2) &= \left(+\frac{5}{6}\right) \times \left(-\frac{1}{2}\right) \\ &= -\left(\frac{5}{6} \times \frac{1}{2}\right) \\ &= -\frac{5}{12} \end{aligned}$$

$$\begin{aligned} 28 \quad \left(-\frac{2}{5}\right) \div (+4) &= \left(-\frac{2}{5}\right) \times \left(+\frac{1}{4}\right) \\ &= -\left(\frac{2}{5} \times \frac{1}{4}\right) \\ &= -\frac{1}{10} \end{aligned}$$

$$\begin{aligned} 29 \quad \left(-\frac{9}{4}\right) \div (+18) &= \left(-\frac{9}{4}\right) \times \left(+\frac{1}{18}\right) \\ &= -\left(\frac{9}{4} \times \frac{1}{18}\right) \\ &= -\frac{1}{8} \end{aligned}$$

$$\begin{aligned} 30 \quad (+6) \div \left(-\frac{1}{8}\right) &= (+6) \times (-8) \\ &= -(6 \times 8) \\ &= -48 \end{aligned}$$

$$\begin{aligned} 31 \quad (+7) \div \left(-\frac{14}{3}\right) &= (+7) \times \left(-\frac{3}{14}\right) \\ &= -\left(7 \times \frac{3}{14}\right) \\ &= -\frac{3}{2} \end{aligned}$$

$$\begin{aligned} 32 \quad (-20) \div \left(+\frac{5}{7}\right) &= (-20) \times \left(+\frac{7}{5}\right) \\ &= -\left(20 \times \frac{7}{5}\right) \\ &= -28 \end{aligned}$$

$$\begin{aligned} 33 \quad \left(+\frac{1}{4}\right) \div \left(+\frac{1}{2}\right) &= \left(+\frac{1}{4}\right) \times (+2) \\ &= +\left(\frac{1}{4} \times 2\right) \\ &= +\frac{1}{2} \end{aligned}$$

$$\begin{aligned} 34 \quad \left(-\frac{1}{3}\right) \div \left(-\frac{1}{9}\right) &= \left(-\frac{1}{3}\right) \times (-9) \\ &= +\left(\frac{1}{3} \times 9\right) \\ &= +3 \end{aligned}$$

$$\begin{aligned} 35 \quad \left(+\frac{5}{6}\right) \div \left(+\frac{5}{6}\right) &= \left(+\frac{5}{6}\right) \times \left(+\frac{6}{5}\right) \\ &= +\left(\frac{5}{6} \times \frac{6}{5}\right) \\ &= +1 \end{aligned}$$

$$\begin{aligned} 36 \quad \left(-\frac{2}{9}\right) \div \left(-\frac{1}{27}\right) &= \left(-\frac{2}{9}\right) \times (-27) \\ &= +\left(\frac{2}{9} \times 27\right) \\ &= +6 \end{aligned}$$

$$\begin{aligned} 37 \quad \left(+\frac{3}{5}\right) \div \left(+\frac{3}{4}\right) &= \left(+\frac{3}{5}\right) \times \left(+\frac{4}{3}\right) \\ &= +\left(\frac{3}{5} \times \frac{4}{3}\right) \\ &= +\frac{4}{5} \end{aligned}$$

$$\begin{aligned} 38 \quad \left(+\frac{4}{7}\right) \div \left(+\frac{8}{3}\right) &= \left(+\frac{4}{7}\right) \times \left(+\frac{3}{8}\right) \\ &= +\left(\frac{4}{7} \times \frac{3}{8}\right) \\ &= +\frac{3}{14} \end{aligned}$$

$$\begin{aligned} 39 \quad \left(-\frac{7}{10}\right) \div \left(-\frac{6}{5}\right) &= \left(-\frac{7}{10}\right) \times \left(-\frac{5}{6}\right) \\ &= +\left(\frac{7}{10} \times \frac{5}{6}\right) \\ &= +\frac{7}{12} \end{aligned}$$

$$\begin{aligned} 40 \quad \left(-\frac{3}{11}\right) \div \left(-\frac{2}{7}\right) &= \left(-\frac{3}{11}\right) \times \left(-\frac{7}{2}\right) \\ &= +\left(\frac{3}{11} \times \frac{7}{2}\right) \\ &= +\frac{21}{22} \end{aligned}$$

$$\begin{aligned} 41 \quad \left(+\frac{5}{3}\right) \div \left(+\frac{7}{4}\right) &= \left(+\frac{5}{3}\right) \times \left(+\frac{4}{7}\right) \\ &= +\left(\frac{5}{3} \times \frac{4}{7}\right) \\ &= +\frac{20}{21} \end{aligned}$$

$$\begin{aligned} 42 \quad \left(-\frac{5}{12}\right) \div \left(-\frac{10}{3}\right) &= \left(-\frac{5}{12}\right) \times \left(-\frac{3}{10}\right) \\ &= +\left(\frac{5}{12} \times \frac{3}{10}\right) \\ &= +\frac{1}{8} \end{aligned}$$

$$\begin{aligned} 43 \quad \left(+\frac{1}{7}\right) \div \left(-\frac{1}{14}\right) &= \left(+\frac{1}{7}\right) \times (-14) \\ &= -\left(\frac{1}{7} \times 14\right) \\ &= -2 \end{aligned}$$

$$\begin{aligned} 44 \quad \left(-\frac{1}{6}\right) \div \left(+\frac{1}{3}\right) &= \left(-\frac{1}{6}\right) \times (+3) \\ &= -\left(\frac{1}{6} \times 3\right) \\ &= -\frac{1}{2} \end{aligned}$$

$$\begin{aligned} 45 \quad \left(+\frac{5}{4}\right) \div \left(-\frac{1}{2}\right) &= \left(+\frac{5}{4}\right) \times (-2) \\ &= -\left(\frac{5}{4} \times 2\right) \\ &= -\frac{5}{2} \end{aligned}$$

$$\begin{aligned} 46 \quad \left(-\frac{1}{9}\right) \div \left(+\frac{2}{3}\right) &= \left(-\frac{1}{9}\right) \times \left(+\frac{3}{2}\right) \\ &= -\left(\frac{1}{9} \times \frac{3}{2}\right) \\ &= -\frac{1}{6} \end{aligned}$$

$$\begin{aligned} 47 \quad \left(-\frac{4}{3}\right) \div \left(+\frac{2}{5}\right) &= \left(-\frac{4}{3}\right) \times \left(+\frac{5}{2}\right) \\ &= -\left(\frac{4}{3} \times \frac{5}{2}\right) \\ &= -\frac{10}{3} \end{aligned}$$

$$\begin{aligned} 48 \quad \left(+\frac{3}{2}\right) \div \left(-\frac{7}{11}\right) &= \left(+\frac{3}{2}\right) \times \left(-\frac{11}{7}\right) \\ &= -\left(\frac{3}{2} \times \frac{11}{7}\right) \\ &= -\frac{33}{14} \end{aligned}$$

$$\begin{aligned} 49 \quad \left(-\frac{1}{8}\right) \div \left(+\frac{2}{13}\right) &= \left(-\frac{1}{8}\right) \times \left(+\frac{13}{2}\right) \\ &= -\left(\frac{1}{8} \times \frac{13}{2}\right) \\ &= -\frac{13}{16} \end{aligned}$$

$$\begin{aligned} 50 \quad \left(-\frac{3}{4}\right) \div \left(+\frac{2}{9}\right) &= \left(-\frac{3}{4}\right) \times \left(+\frac{9}{2}\right) \\ &= -\left(\frac{3}{4} \times \frac{9}{2}\right) \\ &= -\frac{27}{8} \end{aligned}$$

4 정수와 유리수의 곱셈과 나눗셈

$$\begin{aligned} 51 \quad \left(+\frac{5}{6}\right) \div \left(-\frac{10}{9}\right) &= \left(+\frac{5}{6}\right) \times \left(-\frac{9}{10}\right) \\ &= -\left(\frac{5}{6} \times \frac{9}{10}\right) = -\frac{3}{4} \end{aligned}$$

$$\begin{aligned} 52 \quad \left(-\frac{2}{15}\right) \div \left(+\frac{8}{5}\right) &= \left(-\frac{2}{15}\right) \times \left(+\frac{5}{8}\right) \\ &= -\left(\frac{2}{15} \times \frac{5}{8}\right) = -\frac{1}{12} \end{aligned}$$

19

곱셈과 나눗셈의 혼합 계산 /
덧셈, 뺄셈, 곱셈, 나눗셈의 혼합 계산

120쪽

$$\begin{aligned} 1 \quad -27, -27, +\frac{1}{6}, \\ -27, 27, \frac{1}{6}, -18 \end{aligned}$$

$$2 \quad +12$$

$$\begin{aligned} 3 \quad +15 \\ 4 \quad -6 \\ 5 \quad -12 \end{aligned}$$

121쪽 ① 계산 결과를 가분수 또는 기약분수로 나타내지 않아도
정답으로 인정합니다.

$$\begin{aligned} 6 \quad +40 \\ 7 \quad +\frac{49}{5} \\ 8 \quad +\frac{5}{8} \\ 9 \quad -18 \\ 10 \quad -45 \end{aligned}$$

$$\begin{aligned} 11 \quad +\frac{10}{3} \\ 12 \quad -\frac{1}{66} \\ 13 \quad +4 \\ 14 \quad -9 \\ 15 \quad +\frac{1}{12} \end{aligned}$$

122쪽 ① 계산 결과를 가분수 또는 기약분수로 나타내지 않아도
정답으로 인정합니다.

$$\begin{aligned} 16 \quad +\frac{2}{5} \\ 17 \quad +\frac{1}{6} \\ 18 \quad -7 \\ 19 \quad -1 \\ 20 \quad -12 \end{aligned}$$

$$\begin{aligned} 21 \quad -\frac{15}{4} \\ 22 \quad +\frac{10}{21} \\ 23 \quad +\frac{2}{5} \\ 24 \quad -\frac{2}{15} \\ 25 \quad -\frac{27}{4} \end{aligned}$$

123쪽

26 (계산 순서대로)

$$-4, -7, -7$$

27 (계산 순서대로)

$$-6, 2, 2$$

28 (계산 순서대로)

$$16, -7, 9, 9$$

29 (계산 순서대로)

$$-8, 48, 41, 41$$

124쪽

① 계산 결과를 가분수 또는 기약분수로 나타내지 않아도
정답으로 인정합니다.

$$30 \quad -17$$

$$31 \quad 6$$

$$32 \quad 7$$

$$33 \quad 10$$

$$34 \quad -7$$

$$35 \quad 2$$

$$36 \quad \frac{11}{6}$$

$$37 \quad -5$$

$$38 \quad -\frac{2}{5}$$

$$39 \quad 10$$

$$40 \quad -\frac{1}{2}$$

125쪽

41 (계산 순서대로)

$$-4, 20, 22, 22$$

$$42 \quad -26$$

$$43 \quad -2$$

$$44 \quad 5$$

$$45 \quad 18$$

$$46 \quad -\frac{1}{2}$$

$$47 \quad \frac{1}{3}$$

$$48 \quad 30$$

$$49 \quad -\frac{1}{2}$$

$$50 \quad -8$$

$$2 \quad (-9) \times (+8) \div (-6)$$

$$= (-9) \times (+8) \times \left(-\frac{1}{6}\right)$$

$$= +\left(9 \times 8 \times \frac{1}{6}\right)$$

$$= +12$$

$$3 \quad (+5) \div (-4) \times (-12)$$

$$= (+5) \times \left(-\frac{1}{4}\right) \times (-12)$$

$$= +\left(5 \times \frac{1}{4} \times 12\right)$$

$$= +15$$

$$\begin{aligned}
 ④ & (-24) \times (-1)^{10} \div (+4) \\
 & = (-24) \times (+1) \div (+4) \\
 & = (-24) \times (+1) \times \left(+\frac{1}{4}\right) \\
 & = -\left(24 \times 1 \times \frac{1}{4}\right) = -6
 \end{aligned}$$

$$\begin{aligned}
 ⑤ & (-2)^5 \div (-8) \times (-3) \\
 & = (-32) \div (-8) \times (-3) \\
 & = (-32) \times \left(-\frac{1}{8}\right) \times (-3) \\
 & = -\left(32 \times \frac{1}{8} \times 3\right) = -12
 \end{aligned}$$

$$\begin{aligned}
 ⑥ & (-4) \times (-5) \div \left(+\frac{1}{2}\right) \\
 & = (-4) \times (-5) \times (+2) \\
 & = +(4 \times 5 \times 2) = +40
 \end{aligned}$$

$$\begin{aligned}
 ⑦ & \left(-\frac{14}{5}\right) \div (-2) \times (+7) \\
 & = \left(-\frac{14}{5}\right) \times \left(-\frac{1}{2}\right) \times (+7) \\
 & = +\left(\frac{14}{5} \times \frac{1}{2} \times 7\right) \\
 & = +\frac{49}{5}
 \end{aligned}$$

$$\begin{aligned}
 ⑧ & (+3) \times \left(+\frac{5}{4}\right) \div (+6) \\
 & = (+3) \times \left(+\frac{5}{4}\right) \times \left(+\frac{1}{6}\right) \\
 & = +\left(3 \times \frac{5}{4} \times \frac{1}{6}\right) = +\frac{5}{8}
 \end{aligned}$$

$$\begin{aligned}
 ⑨ & (+15) \div \left(-\frac{10}{3}\right) \times (+4) \\
 & = (+15) \times \left(-\frac{3}{10}\right) \times (+4) \\
 & = -\left(15 \times \frac{3}{10} \times 4\right) \\
 & = -18
 \end{aligned}$$

$$\begin{aligned}
 ⑩ & (-12) \times (+3) \div \left(+\frac{4}{5}\right) \\
 & = (-12) \times (+3) \times \left(+\frac{5}{4}\right) \\
 & = -\left(12 \times 3 \times \frac{5}{4}\right) \\
 & = -45
 \end{aligned}$$

$$\begin{aligned}
 ⑪ & (-1) \times \left(-\frac{5}{2}\right) \div \left(+\frac{3}{4}\right) \\
 & = (-1) \times \left(-\frac{5}{2}\right) \times \left(+\frac{4}{3}\right) \\
 & = +\left(1 \times \frac{5}{2} \times \frac{4}{3}\right) \\
 & = +\frac{10}{3}
 \end{aligned}$$

$$\begin{aligned}
 ⑫ & \left(-\frac{6}{11}\right) \div (-18) \times \left(-\frac{1}{2}\right) \\
 & = \left(-\frac{6}{11}\right) \times \left(-\frac{1}{18}\right) \times \left(-\frac{1}{2}\right) \\
 & = -\left(\frac{6}{11} \times \frac{1}{18} \times \frac{1}{2}\right) \\
 & = -\frac{1}{66}
 \end{aligned}$$

$$\begin{aligned}
 ⑬ & (-3) \div \left(+\frac{3}{8}\right) \times \left(-\frac{1}{2}\right) \\
 & = (-3) \times \left(+\frac{8}{3}\right) \times \left(-\frac{1}{2}\right) \\
 & = +\left(3 \times \frac{8}{3} \times \frac{1}{2}\right) \\
 & = +4
 \end{aligned}$$

$$\begin{aligned}
 ⑭ & \left(+\frac{1}{3}\right) \times (-6) \div \left(+\frac{2}{9}\right) \\
 & = \left(+\frac{1}{3}\right) \times (-6) \times \left(+\frac{9}{2}\right) \\
 & = -\left(\frac{1}{3} \times 6 \times \frac{9}{2}\right) \\
 & = -9
 \end{aligned}$$

$$\begin{aligned}
 ⑮ & \left(+\frac{5}{3}\right) \times \left(+\frac{7}{10}\right) \div (+14) \\
 & = \left(+\frac{5}{3}\right) \times \left(+\frac{7}{10}\right) \times \left(+\frac{1}{14}\right) \\
 & = +\left(\frac{5}{3} \times \frac{7}{10} \times \frac{1}{14}\right) \\
 & = +\frac{1}{12}
 \end{aligned}$$

$$\begin{aligned}
 ⑯ & \left(+\frac{1}{3}\right) \times \left(-\frac{1}{2}\right) \div \left(-\frac{5}{12}\right) \\
 & = \left(+\frac{1}{3}\right) \times \left(-\frac{1}{2}\right) \times \left(-\frac{12}{5}\right) \\
 & = +\left(\frac{1}{3} \times \frac{1}{2} \times \frac{12}{5}\right) \\
 & = +\frac{2}{5}
 \end{aligned}$$

4 정수와 유리수의 곱셈과 나눗셈

$$\begin{aligned} 17 \quad & \left(-\frac{1}{4}\right) \div \left(+\frac{2}{3}\right) \times \left(-\frac{4}{9}\right) \\ & = \left(-\frac{1}{4}\right) \times \left(+\frac{3}{2}\right) \times \left(-\frac{4}{9}\right) \\ & = +\left(\frac{1}{4} \times \frac{3}{2} \times \frac{4}{9}\right) \\ & = +\frac{1}{6} \end{aligned}$$

$$\begin{aligned} 18 \quad & \left(+\frac{7}{10}\right) \times \left(-\frac{5}{3}\right) \div \left(+\frac{1}{6}\right) \\ & = \left(+\frac{7}{10}\right) \times \left(-\frac{5}{3}\right) \times (+6) \\ & = -\left(\frac{7}{10} \times \frac{5}{3} \times 6\right) \\ & = -7 \end{aligned}$$

$$\begin{aligned} 19 \quad & \left(+\frac{3}{2}\right) \div \left(+\frac{3}{5}\right) \times \left(-\frac{2}{5}\right) \\ & = \left(+\frac{3}{2}\right) \times \left(+\frac{5}{3}\right) \times \left(-\frac{2}{5}\right) \\ & = -\left(\frac{3}{2} \times \frac{5}{3} \times \frac{2}{5}\right) \\ & = -1 \end{aligned}$$

$$\begin{aligned} 20 \quad & \left(-\frac{6}{5}\right) \div \left(-\frac{2}{15}\right) \times \left(-\frac{4}{3}\right) \\ & = \left(-\frac{6}{5}\right) \times \left(-\frac{15}{2}\right) \times \left(-\frac{4}{3}\right) \\ & = -\left(\frac{6}{5} \times \frac{15}{2} \times \frac{4}{3}\right) \\ & = -12 \end{aligned}$$

$$\begin{aligned} 21 \quad & \left(+\frac{5}{6}\right) \div (-2) \times (-3)^2 \\ & = \left(+\frac{5}{6}\right) \div (-2) \times (+9) \\ & = \left(+\frac{5}{6}\right) \times \left(-\frac{1}{2}\right) \times (+9) \\ & = -\left(\frac{5}{6} \times \frac{1}{2} \times 9\right) \\ & = -\frac{15}{4} \end{aligned}$$

$$\begin{aligned} 22 \quad & \left(-\frac{3}{7}\right) \div (-1)^7 \times \left(+\frac{10}{9}\right) \\ & = \left(-\frac{3}{7}\right) \div (-1) \times \left(+\frac{10}{9}\right) \\ & = \left(-\frac{3}{7}\right) \times (-1) \times \left(+\frac{10}{9}\right) \\ & = +\left(\frac{3}{7} \times 1 \times \frac{10}{9}\right) \\ & = +\frac{10}{21} \end{aligned}$$

참고 $(-1) \times (-1) = 1$ 이므로 -1 의 역수는 -1 입니다.

$$\begin{aligned} 23 \quad & \left(+\frac{8}{5}\right) \times \left(-\frac{1}{2}\right)^4 \div \left(+\frac{1}{4}\right) \\ & = \left(+\frac{8}{5}\right) \times \left(+\frac{1}{16}\right) \div \left(+\frac{1}{4}\right) \\ & = \left(+\frac{8}{5}\right) \times \left(+\frac{1}{16}\right) \times (+4) \\ & = +\left(\frac{8}{5} \times \frac{1}{16} \times 4\right) \\ & = +\frac{2}{5} \end{aligned}$$

$$\begin{aligned} 24 \quad & \left(-\frac{1}{6}\right)^2 \div \left(+\frac{7}{12}\right) \times \left(-\frac{14}{5}\right) \\ & = \left(+\frac{1}{36}\right) \div \left(+\frac{7}{12}\right) \times \left(-\frac{14}{5}\right) \\ & = \left(+\frac{1}{36}\right) \times \left(+\frac{12}{7}\right) \times \left(-\frac{14}{5}\right) \\ & = -\left(\frac{1}{36} \times \frac{12}{7} \times \frac{14}{5}\right) \\ & = -\frac{2}{15} \end{aligned}$$

$$\begin{aligned} 25 \quad & \left(-\frac{3}{2}\right)^2 \times \left(-\frac{4}{3}\right) \div \left(-\frac{2}{3}\right)^2 \\ & = \left(+\frac{9}{4}\right) \times \left(-\frac{4}{3}\right) \div \left(+\frac{4}{9}\right) \\ & = \left(+\frac{9}{4}\right) \times \left(-\frac{4}{3}\right) \times \left(+\frac{9}{4}\right) \\ & = -\left(\frac{9}{4} \times \frac{4}{3} \times \frac{9}{4}\right) \\ & = -\frac{27}{4} \end{aligned}$$

$$30 \quad (-2) \times 7 + (-3) = (-14) + (-3) = -17$$

$$31 \quad 9 - (-12) \div (-4) = 9 - 3 = 6$$

$$\begin{aligned}\textcircled{32} (+15) \div (-3) - 2 \times (-6) &= (-5) - (-12) \\ &= (-5) + (+12) \\ &= 7\end{aligned}$$

$$\begin{aligned}\textcircled{33} (-8) + (-3)^2 \times 2 &= (-8) + 9 \times 2 \\ &= (-8) + 18 \\ &= 10\end{aligned}$$

$$\begin{aligned}\textcircled{34} (-5) \div \frac{5}{6} + (-1) &= (-5) \times \frac{6}{5} + (-1) \\ &= (-6) + (-1) \\ &= -7\end{aligned}$$

$$\textcircled{35} 8 - \left(-\frac{3}{7}\right) \times (-14) = 8 - 6 = 2$$

$$\begin{aligned}\textcircled{36} \frac{2}{9} \div \left(-\frac{4}{3}\right) + 2 &= \frac{2}{9} \times \left(-\frac{3}{4}\right) + 2 \\ &= \left(-\frac{1}{6}\right) + 2 \\ &= \left(-\frac{1}{6}\right) + \frac{12}{6} \\ &= \frac{11}{6}\end{aligned}$$

$$\textcircled{37} (-3) - \left(-\frac{3}{4}\right) \times \left(-\frac{8}{3}\right) = (-3) - 2 = -5$$

$$\begin{aligned}\textcircled{38} \left(-\frac{4}{5}\right) - \frac{5}{2} \times \left(-\frac{4}{25}\right) &= \left(-\frac{4}{5}\right) - \left(-\frac{2}{5}\right) \\ &= \left(-\frac{4}{5}\right) + \left(+\frac{2}{5}\right) \\ &= -\frac{2}{5}\end{aligned}$$

$$\begin{aligned}\textcircled{39} \left(-\frac{1}{3}\right) \times (-9) \div \frac{3}{8} - (-2) \\ &= \left(-\frac{1}{3}\right) \times (-9) \times \frac{8}{3} - (-2) \\ &= +\left(\frac{1}{3} \times 9 \times \frac{8}{3}\right) + (+2) \\ &= 8 + (+2) \\ &= 10\end{aligned}$$

$$\begin{aligned}\textcircled{40} \left(-\frac{1}{2}\right)^3 \times (-6) \div \frac{3}{10} - 3 \\ &= \left(-\frac{1}{8}\right) \times (-6) \times \frac{10}{3} - 3 \\ &= +\left(\frac{1}{8} \times 6 \times \frac{10}{3}\right) - 3 \\ &= \frac{5}{2} - 3 = \frac{5}{2} - \frac{6}{2} = -\frac{1}{2}\end{aligned}$$

$$\begin{aligned}\textcircled{42} 13 - 3 \times \{4 - (-9)\} \\ &= 13 - 3 \times \{4 + (+9)\} \\ &= 13 - 3 \times 13 \\ &= 13 - 39 \\ &= -26\end{aligned}$$

$$\begin{aligned}\textcircled{43} \{7 - (-5)\} \div (-2) + 4 \\ &= \{7 + (+5)\} \div (-2) + 4 \\ &= 12 \div (-2) + 4 \\ &= (-6) + 4 \\ &= -2\end{aligned}$$

$$\begin{aligned}\textcircled{44} (-25) \div \{(-5) \times 3 + 10\} \\ &= (-25) \div \{(-15) + 10\} \\ &= (-25) \div (-5) \\ &= 5\end{aligned}$$

$$\begin{aligned}\textcircled{45} \{6 + 12 \times (-1)^{29}\} \times (-3) \\ &= \{6 + 12 \times (-1)\} \times (-3) \\ &= \{6 + (-12)\} \times (-3) \\ &= (-6) \times (-3) \\ &= 18\end{aligned}$$

$$\begin{aligned}\textcircled{46} (-2) \times \left(6 - \frac{1}{2}\right) \div 22 \\ &= (-2) \times \left(\frac{12}{2} - \frac{1}{2}\right) \div 22 \\ &= (-2) \times \frac{11}{2} \div 22 \\ &= (-2) \times \frac{11}{2} \times \frac{1}{22} \\ &= -\left(2 \times \frac{11}{2} \times \frac{1}{22}\right) \\ &= -\frac{1}{2}\end{aligned}$$

$$\begin{aligned}\textcircled{47} 2 \times \left\{\frac{2}{3} - \left(-\frac{1}{2}\right)\right\} \div 7 \\ &= 2 \times \left\{\frac{4}{6} + \left(+\frac{3}{6}\right)\right\} \div 7 \\ &= 2 \times \frac{7}{6} \div 7 \\ &= 2 \times \frac{7}{6} \times \frac{1}{7} \\ &= \frac{1}{3}\end{aligned}$$

4 정수와 유리수의 곱셈과 나눗셈

$$\begin{aligned} 48 \quad & \left\{ 3 - 8 \div \left(-\frac{2}{3} \right) \right\} \times 2 = \left\{ 3 - 8 \times \left(-\frac{3}{2} \right) \right\} \times 2 \\ & = \{ 3 - (-12) \} \times 2 \\ & = \{ 3 + (+12) \} \times 2 \\ & = 15 \times 2 \\ & = 30 \end{aligned}$$

$$\begin{aligned} 49 \quad & (-7) \div \left\{ 16 - (21 - 13) \times \frac{1}{4} \right\} \\ & = (-7) \div \left(16 - 8 \times \frac{1}{4} \right) \\ & = (-7) \div (16 - 2) \\ & = (-7) \div 14 \\ & = (-7) \times \frac{1}{14} \\ & = -\frac{1}{2} \end{aligned}$$

$$\begin{aligned} 50 \quad & (-2) + 3 \times \left\{ (-2)^3 + 8 \div \frac{4}{3} \right\} \\ & = (-2) + 3 \times \left\{ (-8) + 8 \times \frac{3}{4} \right\} \\ & = (-2) + 3 \times \{ (-8) + 6 \} \\ & = (-2) + 3 \times (-2) \\ & = (-2) + (-6) \\ & = -8 \end{aligned}$$

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정수와 유리수의 곱셈과 나눗셈 평가

126쪽 ① 계산 결과를 가분수 또는 기약분수로 나타내지 않아도 정답으로 인정합니다.

- | | |
|-------------------|-------------------|
| ① +20 | ⑦ $-\frac{1}{6}$ |
| ② +42 | ⑧ $+\frac{14}{5}$ |
| ③ -72 | ⑨ -0.78 |
| ④ $+\frac{7}{2}$ | ⑩ $+\frac{7}{4}$ |
| ⑤ $-\frac{15}{4}$ | ⑪ $-\frac{2}{5}$ |
| ⑥ -8.5 | ⑫ 0 |

127쪽 ① 계산 결과를 가분수 또는 기약분수로 나타내지 않아도 정답으로 인정합니다.

- | | |
|--|--------------------|
| ⑬ +2, +2, +10,
-190 / (가), (나) | ⑮ -36 |
| ⑭ $-\frac{2}{9}$, $-\frac{2}{9}$, $+\frac{1}{3}$,
$+\frac{7}{15}$ / (가), (나) | ⑯ +14 |
| | ⑰ -5.4 |
| | ⑱ $-\frac{15}{14}$ |
| | ⑲ $+\frac{1}{2}$ |

128쪽

- | | |
|-------|--------|
| ⑳ +81 | ㉕ +4 |
| ㉑ +25 | ㉖ +7 |
| ㉒ -12 | ㉗ -6 |
| ㉓ 13 | ㉘ -0.7 |
| ㉔ 42 | ㉙ +5 |
| | ㉚ 0 |

129쪽 ① 계산 결과를 가분수 또는 기약분수로 나타내지 않아도 정답으로 인정합니다.

- | | |
|-------------------|-------------------|
| ㉛ $+\frac{1}{5}$ | ㉞ +21 |
| ㉜ -14 | ㉟ $+\frac{32}{3}$ |
| ㉝ $+\frac{1}{2}$ | ㊱ -4 |
| ㉞ $-\frac{7}{5}$ | ㊲ -5 |
| ㉟ $-\frac{15}{8}$ | ㊳ 3 |

$$① (+4) \times (+5) = +(4 \times 5) = +20$$

$$② (-7) \times (-6) = +(7 \times 6) = +42$$

$$③ (+6) \times (-12) = -(6 \times 12) = -72$$

$$④ \left(+\frac{7}{8} \right) \times (+4) = +\left(\frac{7}{8} \times 4 \right) = +\frac{7}{2}$$

$$⑤ (-15) \times \left(+\frac{1}{4} \right) = -\left(15 \times \frac{1}{4} \right) = -\frac{15}{4}$$

$$\textcircled{6} (-5) \times (+1.7) = -(5 \times 1.7) = -8.5$$

$$\textcircled{7} \left(+\frac{1}{2}\right) \times \left(-\frac{1}{3}\right) = -\left(\frac{1}{2} \times \frac{1}{3}\right) = -\frac{1}{6}$$

$$\textcircled{8} \left(+\frac{6}{5}\right) \times \left(+\frac{7}{3}\right) = +\left(\frac{6}{5} \times \frac{7}{3}\right) = +\frac{14}{5}$$

$$\textcircled{9} (-2.6) \times (+0.3) = -(2.6 \times 0.3) = -0.78$$

$$\begin{aligned}\textcircled{10} \left(-\frac{7}{6}\right) \times (-1.5) &= +\left(\frac{7}{6} \times 1.5\right) \\ &= +\left(\frac{7}{6} \times \frac{3}{2}\right) \\ &= +\frac{7}{4}\end{aligned}$$

$$\begin{aligned}\textcircled{11} \left(+\frac{4}{5}\right) \times (-0.5) &= -\left(\frac{4}{5} \times 0.5\right) \\ &= -\left(\frac{4}{5} \times \frac{1}{2}\right) \\ &= -\frac{2}{5}\end{aligned}$$

$$\begin{aligned}\textcircled{15} (-3) \times (+6) \times (+2) &= -(3 \times 6 \times 2) \\ &= -36\end{aligned}$$

$$\begin{aligned}\textcircled{16} (-8) \times \left(+\frac{7}{12}\right) \times (-3) &= +\left(8 \times \frac{7}{12} \times 3\right) \\ &= +14\end{aligned}$$

$$\begin{aligned}\textcircled{17} (-0.4) \times (-5) \times (-2.7) &= -(0.4 \times 5 \times 2.7) \\ &= -5.4\end{aligned}$$

$$\begin{aligned}\textcircled{18} \left(+\frac{4}{7}\right) \times \left(+\frac{5}{6}\right) \times \left(-\frac{9}{4}\right) &= -\left(\frac{4}{7} \times \frac{5}{6} \times \frac{9}{4}\right) \\ &= -\frac{15}{14}\end{aligned}$$

$$\begin{aligned}\textcircled{19} \left(+\frac{4}{9}\right) \times (-18) \times \left(+\frac{3}{8}\right) \times \left(-\frac{1}{6}\right) \\ &= +\left(\frac{4}{9} \times 18 \times \frac{3}{8} \times \frac{1}{6}\right) \\ &= +\frac{1}{2}\end{aligned}$$

$$\textcircled{20} (-3)^4 = +(3 \times 3 \times 3 \times 3) = +81$$

$$\textcircled{21} -5^2 \times (-1)^{11} = -25 \times (-1) = +25$$

$$\begin{aligned}\textcircled{22} \left(-\frac{1}{3}\right)^2 \times \left(+\frac{3}{2}\right)^3 \times (-2)^5 \\ &= \left(+\frac{1}{9}\right) \times \left(+\frac{27}{8}\right) \times (-32) \\ &= -\left(\frac{1}{9} \times \frac{27}{8} \times 32\right) \\ &= -12\end{aligned}$$

$$\begin{aligned}\textcircled{23} (-15) \times \left\{\left(-\frac{2}{3}\right) + \left(-\frac{1}{5}\right)\right\} \\ &= (-15) \times \left(-\frac{2}{3}\right) + (-15) \times \left(-\frac{1}{5}\right) \\ &= 10 + 3 \\ &= 13\end{aligned}$$

$$\begin{aligned}\textcircled{24} 13 \times 4.2 - 3 \times 4.2 &= (13 - 3) \times 4.2 \\ &= 10 \times 4.2 \\ &= 42\end{aligned}$$

$$\textcircled{25} (+8) \div (+2) = +(8 \div 2) = +4$$

$$\textcircled{26} (-35) \div (-5) = +(35 \div 5) = +7$$

$$\textcircled{27} (+18) \div (-3) = -(18 \div 3) = -6$$

$$\textcircled{28} (-4.9) \div (+7) = -(4.9 \div 7) = -0.7$$

$$\begin{aligned}\textcircled{29} (-7.5) \div (-1.5) &= +(7.5 \div 1.5) \\ &= +(75 \div 15) \\ &= +5\end{aligned}$$

$$\begin{aligned}\textcircled{31} \left(+\frac{2}{5}\right) \div (+2) &= \left(+\frac{2}{5}\right) \times \left(+\frac{1}{2}\right) \\ &= +\left(\frac{2}{5} \times \frac{1}{2}\right) \\ &= +\frac{1}{5}\end{aligned}$$

$$\begin{aligned}\textcircled{32} (+7) \div \left(-\frac{1}{2}\right) &= (+7) \times (-2) \\ &= -(7 \times 2) \\ &= -14\end{aligned}$$

4 정수와 유리수의 곱셈과 나눗셈

$$\begin{aligned} 33 \quad \left(-\frac{1}{8}\right) \div \left(-\frac{1}{4}\right) &= \left(-\frac{1}{8}\right) \times (-4) \\ &= +\left(\frac{1}{8} \times 4\right) \\ &= +\frac{1}{2} \end{aligned}$$

$$\begin{aligned} 34 \quad \left(+\frac{3}{5}\right) \div \left(-\frac{3}{7}\right) &= \left(+\frac{3}{5}\right) \times \left(-\frac{7}{3}\right) \\ &= -\left(\frac{3}{5} \times \frac{7}{3}\right) \\ &= -\frac{7}{5} \end{aligned}$$

$$\begin{aligned} 35 \quad \left(-\frac{9}{4}\right) \div \left(+\frac{6}{5}\right) &= \left(-\frac{9}{4}\right) \times \left(+\frac{5}{6}\right) \\ &= -\left(\frac{9}{4} \times \frac{5}{6}\right) \\ &= -\frac{15}{8} \end{aligned}$$

$$\begin{aligned} 36 \quad (-2) \times (-3) \div \frac{2}{7} &= (-2) \times (-3) \times \frac{7}{2} \\ &= +\left(2 \times 3 \times \frac{7}{2}\right) \\ &= +21 \end{aligned}$$

$$\begin{aligned} 37 \quad \left(-\frac{18}{5}\right) \div \left(-\frac{3}{4}\right)^2 \times \left(-\frac{5}{3}\right) \\ &= \left(-\frac{18}{5}\right) \div \left(+\frac{9}{16}\right) \times \left(-\frac{5}{3}\right) \\ &= \left(-\frac{18}{5}\right) \times \left(+\frac{16}{9}\right) \times \left(-\frac{5}{3}\right) \\ &= +\left(\frac{18}{5} \times \frac{16}{9} \times \frac{5}{3}\right) \\ &= +\frac{32}{3} \end{aligned}$$

$$\begin{aligned} 38 \quad (-6) - 20 \div (-10) &= (-6) - (-2) \\ &= -6 + (+2) \\ &= -4 \end{aligned}$$

$$\begin{aligned} 39 \quad 3 \times \{7 - (-8)\} \div (-9) \\ &= 3 \times \{7 + (+8)\} \div (-9) \\ &= 3 \times 15 \div (-9) \\ &= 3 \times 15 \times \left(-\frac{1}{9}\right) \\ &= -\left(3 \times 15 \times \frac{1}{9}\right) \\ &= -5 \end{aligned}$$

$$\begin{aligned} 40 \quad \left\{1 + (8 - 23) \times \frac{1}{5}\right\} \div \left(-\frac{2}{3}\right) \\ &= \left\{1 + (-15) \times \frac{1}{5}\right\} \div \left(-\frac{2}{3}\right) \\ &= \{1 + (-3)\} \div \left(-\frac{2}{3}\right) \\ &= (-2) \div \left(-\frac{2}{3}\right) \\ &= (-2) \times \left(-\frac{3}{2}\right) \\ &= 3 \end{aligned}$$



130쪽

① 2, 7, 19, 31, 43, 47

② 2

③ 2, 11

④ 2, 3

⑤ 2, 3, 5

⑥ $\frac{6}{3}, 1$

⑦ -3, 14, -4, -27

⑧ -3, 14, $+\frac{1}{2}$

⑨ 10, -10

⑩ $-\frac{1}{6}$

131쪽

⑪ <

⑫ >

⑬ <

⑭ $a \leq 0.2$

⑮ $1 \leq a < \frac{5}{3}$

⑯ 4 / 8

⑰ 6 / 90

⑱ 2 / 360

⑲ 2 / 180

⑳ 2 / 2100

132쪽

① 계산 결과를 가분수 또는 기약분수로 나타내지 않아도 정답으로 인정합니다.

㉑ +29

㉒ $-\frac{31}{15}$

㉓ +2.7

㉔ $-\frac{23}{14}$

㉕ $-\frac{8}{15}$

㉖ +27

㉗ +5

㉘ +24

㉙ $-\frac{3}{20}$

㉚ $\frac{5}{3}$

② $16=2^4$ 이므로 16의 소인수는 2입니다.

③ $22=2 \times 11$ 이므로 22의 소인수는 2, 11입니다.

④ $36=2^2 \times 3^2$ 이므로 36의 소인수는 2, 3입니다.

⑤ $60=2^2 \times 3 \times 5$ 이므로 60의 소인수는 2, 3, 5입니다.

⑫ $+3 = +\frac{9}{3} \Rightarrow +\frac{9}{3} > +\frac{8}{3} \Rightarrow +3 > +\frac{8}{3}$

⑬ $-1.3 = -\frac{13}{10} = -\frac{39}{30}$, $-\frac{19}{15} = -\frac{38}{30}$ 이고,
 $-\frac{39}{30} < -\frac{38}{30}$ 이므로 $-1.3 < -\frac{19}{15}$ 입니다.

⑬

$$\frac{2^2}{2^3}$$

(최대공약수) $= 2^2 = 4$

(최소공배수) $= 2^3 = 8$

⑭

$$\frac{2 \times 3^2}{2 \times 3 \times 5}$$

(최대공약수) $= 2 \times 3 = 6$

(최소공배수) $= 2 \times 3^2 \times 5 = 90$

⑮

$$\frac{2^2 \times 5}{2^3 \times 3^2}$$

$$\frac{2^2 \times 5}{2 \times 3^2 \times 5}$$

(최대공약수) $= 2$

(최소공배수) $= 2^3 \times 3^2 \times 5 = 360$

⑯

$$\frac{18 = 2 \times 3^2}{20 = 2^2 \times 5}$$

$$\frac{18 = 2 \times 3^2}{20 = 2^2 \times 5}$$

(최대공약수) $= 2$

(최소공배수) $= 2^2 \times 3^2 \times 5 = 180$

⑰

$$\frac{28 = 2^2 \times 7}{30 = 2 \times 3 \times 5}$$

$$\frac{28 = 2^2 \times 7}{30 = 2 \times 3 \times 5}$$

$$\frac{28 = 2^2 \times 7}{50 = 2 \times 5^2}$$

(최대공약수) $= 2$

(최소공배수) $= 2^2 \times 3 \times 5^2 \times 7 = 2100$

㉑ $(+17) - (-12) = (+17) + (+12)$
 $= +(17+12)$
 $= +29$

㉒ $(-\frac{5}{3}) + (-\frac{2}{5}) = -(\frac{5}{3} + \frac{2}{5})$
 $= -(\frac{25}{15} + \frac{6}{15})$
 $= -\frac{31}{15}$

㉓ $(+4.6) + (-1.9) = +(4.6-1.9) = +2.7$

㉔ $(+\frac{5}{7}) + (-3) - (-\frac{9}{14})$
 $= (+\frac{5}{7}) + (-3) + (+\frac{9}{14})$
 $= (+\frac{5}{7}) + (+\frac{9}{14}) + (-3)$
 $= \{(+\frac{10}{14}) + (+\frac{9}{14})\} + (-3)$
 $= (+\frac{19}{14}) + (-\frac{42}{14}) = -\frac{23}{14}$

$$\begin{aligned}
 25 \quad \frac{4}{3} - 1.7 - \frac{1}{6} &= \left(+\frac{4}{3}\right) - (+1.7) - \left(+\frac{1}{6}\right) \\
 &= \left(+\frac{4}{3}\right) + (-1.7) + \left(-\frac{1}{6}\right) \\
 &= \left\{\left(+\frac{4}{3}\right) + \left(-\frac{1}{6}\right)\right\} + (-1.7) \\
 &= \left\{\left(+\frac{8}{6}\right) + \left(-\frac{1}{6}\right)\right\} + (-1.7) \\
 &= \left(+\frac{7}{6}\right) + \left(-\frac{17}{10}\right) \\
 &= \left(+\frac{35}{30}\right) + \left(-\frac{51}{30}\right) \\
 &= -\frac{16}{30} = -\frac{8}{15}
 \end{aligned}$$

$$26 \quad (+9) \times (+3) = +(9 \times 3) = +27$$

$$27 \quad (-25) \div (-5) = +(25 \div 5) = +5$$

$$28 \quad (-12) \times (+0.4) \times (-5) = +(12 \times 0.4 \times 5) = +24$$

$$\begin{aligned}
 29 \quad \left(-\frac{1}{3}\right) \div \left(+\frac{5}{2}\right) \times \left(+\frac{9}{8}\right) \\
 &= \left(-\frac{1}{3}\right) \times \left(+\frac{2}{5}\right) \times \left(+\frac{9}{8}\right) \\
 &= -\left(\frac{1}{3} \times \frac{2}{5} \times \frac{9}{8}\right) \\
 &= -\frac{3}{20}
 \end{aligned}$$

$$\begin{aligned}
 30 \quad 2 + \left\{(-6) \times \left(-\frac{1}{3}\right)^3 - 1\right\} \div \frac{7}{3} \\
 &= 2 + \left\{(-6) \times \left(-\frac{1}{27}\right) - 1\right\} \div \frac{7}{3} \\
 &= 2 + \left(\frac{2}{9} - 1\right) \div \frac{7}{3} \\
 &= 2 + \left(\frac{2}{9} - \frac{9}{9}\right) \div \frac{7}{3} \\
 &= 2 + \left(-\frac{7}{9}\right) \div \frac{7}{3} \\
 &= 2 + \left(-\frac{7}{9}\right) \times \frac{3}{7} \\
 &= 2 + \left(-\frac{1}{3}\right) \\
 &= \frac{6}{3} + \left(-\frac{1}{3}\right) \\
 &= \frac{5}{3}
 \end{aligned}$$

성취도 평가 2회

133쪽

① 소

② 합

③ $\left(\frac{1}{5}\right)^4$

④ $3^3 \times 7^2$

⑤ $-11, -\frac{10}{5}$

⑥ $-11, +1, -\frac{1}{3},$

$2.22, -\frac{10}{5}$

⑦ $-4, +1$

⑧ $-\frac{1}{4}, +\frac{7}{3}$

134쪽

⑨ 60 / 600

⑩ 6 / 1260

⑪ 22 / 484

⑫ 3 / 378

⑬ $-5, -3.2, 0,$

$+\frac{1}{2}, 8$

⑭ $-\frac{5}{2}, -\frac{12}{5},$

$1.4, +3, +\frac{19}{6}$

⑮ $-\frac{5}{4}, -\frac{5}{4},$

$+\frac{1}{6}, +\frac{7}{18}$

135쪽

① 계산 결과를 가분수 또는 기약분수로 나타내지 않아도 정답으로 인정합니다.

⑬ $+15$

⑮ $-\frac{7}{2}$

⑰ $+8.4$

⑲ $+\frac{38}{15}$

⑳ 0

㉑ -108

㉓ $+7$

㉕ $+\frac{9}{2}$

㉗ 29

㉙ 90

9

$$\begin{array}{r}
 2^3 \times 3 \times 5 \\
 2^2 \times 3 \times 5^2
 \end{array}$$

$$(\text{최대공약수}) = 2^2 \times 3 \times 5 = 60$$

$$(\text{최소공배수}) = 2^3 \times 3 \times 5^2 = 600$$

$$\begin{array}{r} 10 \quad \frac{2 \times 3^2 \times 5}{2^2 \times 3 \times 5} \\ \frac{2^2 \times 3^2}{2^2 \times 3^2} \times 7 \\ \hline (\text{최대공약수}) = 2 \times 3 = 6 \\ (\text{최소공배수}) = 2^2 \times 3^2 \times 5 \times 7 = 1260 \end{array}$$

$$\begin{array}{r} 11 \quad \frac{44 = 2^2 \times 11}{242 = 2 \times 11^2} \\ \hline (\text{최대공약수}) = 2 \times 11 = 22 \\ (\text{최소공배수}) = 2^2 \times 11^2 = 484 \end{array}$$

$$\begin{array}{r} 12 \quad \frac{27 = 3^3}{42 = 2 \times 3 \times 7} \\ \frac{63 = 3^2 \times 7}{\hline} \\ (\text{최대공약수}) = 3 \\ (\text{최소공배수}) = 2 \times 3^3 \times 7 = 378 \end{array}$$

13 양수끼리 크기를 비교하면 $+\frac{1}{2} < 8$

음수끼리 크기를 비교하면 $-5 < -3.2$

따라서 수를 작은 것부터 차례대로 쓰면

$-5, -3.2, 0, +\frac{1}{2}, 8$ 입니다.

14 양수끼리 크기를 비교하면 $1.4 < +3 < +\frac{19}{6}$

$$-\frac{12}{5} = -\frac{24}{10}, -\frac{5}{2} = -\frac{25}{10} \text{이므로}$$

음수끼리 크기를 비교하면 $-\frac{5}{2} < -\frac{12}{5}$ 입니다.

따라서 수를 작은 것부터 차례대로 쓰면

$-\frac{5}{2}, -\frac{12}{5}, 1.4, +3, +\frac{19}{6}$ 입니다.

16 $(+4) + (+11) = +(4+11) = +15$

$$\begin{aligned} 17 \quad (-2) + \left(-\frac{3}{2}\right) &= -\left(2 + \frac{3}{2}\right) \\ &= -\left(\frac{4}{2} + \frac{3}{2}\right) \\ &= -\frac{7}{2} \end{aligned}$$

$$\begin{aligned} 18 \quad (+2.6) - (-5.8) &= (+2.6) + (+5.8) \\ &= +(2.6+5.8) \\ &= +8.4 \end{aligned}$$

$$\begin{aligned} 19 \quad \left(+\frac{8}{3}\right) - (+0.8) - \left(-\frac{2}{3}\right) \\ &= \left(+\frac{8}{3}\right) + (-0.8) + \left(+\frac{2}{3}\right) \\ &= \left\{\left(+\frac{8}{3}\right) + \left(+\frac{2}{3}\right)\right\} + (-0.8) \\ &= \left(+\frac{10}{3}\right) + \left(-\frac{4}{5}\right) \\ &= \left(+\frac{50}{15}\right) + \left(-\frac{12}{15}\right) \\ &= +\frac{38}{15} \end{aligned}$$

$$\begin{aligned} 20 \quad -9 + 23 - 14 &= (-9) + (+23) - (+14) \\ &= (-9) + (+23) + (-14) \\ &= (+23) + \{(-9) + (-14)\} \\ &= (+23) + (-23) \\ &= 0 \end{aligned}$$

21 $(+9) \times (-12) = -(9 \times 12) = -108$

$$\begin{aligned} 22 \quad (-9.8) \div (-1.4) &= +(9.8 \div 1.4) \\ &= +(98 \div 14) \\ &= +7 \end{aligned}$$

$$\begin{aligned} 23 \quad (-5) \times \left(+\frac{9}{20}\right) \times (-2) &= \left(5 \times \frac{9}{20} \times 2\right) \\ &= +\frac{9}{2} \end{aligned}$$

$$\begin{aligned} 24 \quad (-24) \times \left\{\left(-\frac{5}{6}\right) + \left(-\frac{3}{8}\right)\right\} \\ &= (-24) \times \left(-\frac{5}{6}\right) + (-24) \times \left(-\frac{3}{8}\right) \\ &= 20 + 9 \\ &= 29 \end{aligned}$$

$$\begin{aligned} 25 \quad \left\{-1 + (12-15) \times \frac{7}{9}\right\} \div \left(-\frac{1}{3}\right)^3 \\ &= \left\{-1 + (12-15) \times \frac{7}{9}\right\} \div \left(-\frac{1}{27}\right) \\ &= \left\{-1 + (-3) \times \frac{7}{9}\right\} \div \left(-\frac{1}{27}\right) \\ &= \left\{-1 + \left(-\frac{7}{3}\right)\right\} \div \left(-\frac{1}{27}\right) \\ &= \left(-\frac{10}{3}\right) \div \left(-\frac{1}{27}\right) \\ &= \left(-\frac{10}{3}\right) \times (-27) = 90 \end{aligned}$$

memo



memo



memo

