

64~65쪽 1 (1) 30 (2) 6 (3) $\sqrt{6}$ 2 10, $\sqrt{10}$ kg

3 (1) -3 (2) 12 (3) $2\sqrt{3}$ 4 16, 4°C

5 (1) ① 4

②

변량	2	6	4	3	5
편차	-2	2	0	-1	1
(편차) ²	4	4	0	1	1

③ 10 ④ 2 ⑤ $\sqrt{2}$

(2) ① 9

②

변량	4	5	14	11	13	7
편차	-5	-4	5	2	4	-2
(편차) ²	25	16	25	4	16	4

③ 90 ④ 15 ⑤ $\sqrt{15}$

(3) ① 12

②

변량	5	13	10	11	19	14
편차	-7	1	-2	-1	7	2
(편차) ²	49	1	4	1	49	4

③ 108 ④ 18 ⑤ $3\sqrt{2}$

6 $2, \sqrt{2}$ 회 7 $8, 2\sqrt{2}$ 시간 8 $20, 2\sqrt{5}$ 점

66~67쪽 1 (1) B팀 (2) C팀

2 (1) 재민 (2) 혜지 (3) 보연

3 (1) ○ (2) × (3) × (4) × (5) ○ (6) ×

4 (1) L (2) L (3) C

5 (1) 7.6점, 7.6점 (2) 영화 A (3) 영화 B

6 (1) 도현 (2) 바다

7 (1) 2회, 2회 (2) B반 (3) A반

68쪽 1 156, 159, 163, 165, 167, 171, 174, 176, 182

(1) 156 cm (2) 182 cm (3) 167 cm (4) 161 cm

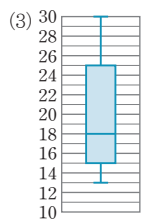
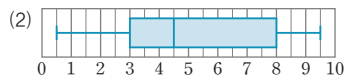
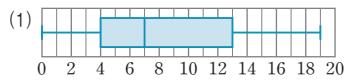
(5) 175 cm (6) 26 cm (7) 14 cm

2 5, 6, 7, 8, 8, 9, 10, 11, 12, 16

(1) 5권 (2) 16권 (3) 8.5권 (4) 7권

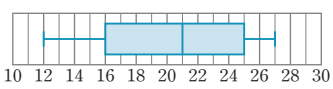
(5) 11권 (6) 11권 (7) 4권

69쪽 1



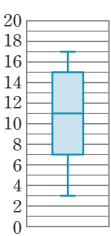
2 (1)

최솟값	제1사분위수	중앙값	제3사분위수	최댓값
12	16	21	25	27



(2)

최솟값	제1사분위수	중앙값	제3사분위수	최댓값
3	7	11	15	17



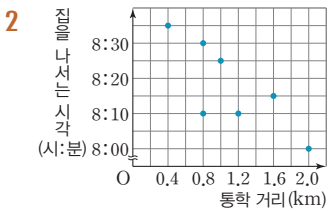
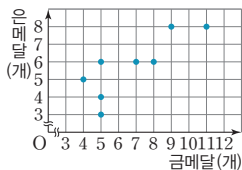
70쪽 1 (1) 10권 (2) 13권 (3) 2권 (4) 약 25% (5) ㉠

2 (1) 7회 (2) 12회 (3) 12회 (4) 약 50% (5) ㉠

71쪽 1 (1) 제품 B (2) 제품 A (3) 제품 B (4) 제품 A

2 (1) 4회 (2) B반 (3) B반 (4) A반

72쪽 1



3 (1) 15°C (2) 2개

4 (1) 4점 (2) 7점

73~74쪽 1 (1) 4명 (2) 2명 (3) 3명 (4) $3, \frac{1}{4}$

2 (1) 4명 (2) 2명 (3) 4명 (4) 4, 40

3 (1) 5명 (2) $\frac{1}{3}$

4 (1) 8명 (2) 55%

5 (1) 2명 (2) 3명 (3) 18편 (4) 25% (5) $\frac{1}{8}$

75~76쪽 1 (1) ㄷ, ㄹ (2) ㄱ (3) ㄴ, ㄹ, ㅁ (4) ㄷ

2 양의 상관관계

3 (1) 양 (2) 없다 (3) 음 (4) 없다 (5) 양 (6) 음

4 (1) ○ (2) × (3) × (4) ○ (5) × (6) ○ (7) ×

5 (1) 양의 상관관계 (2) C (3) A

6 (1) 음의 상관관계 (2) B (3) 2

77~79쪽 대단원 개념 마무리

I (1)

변량	27	36	31	23	28
편차	-2	7	2	-6	-1

(2)

변량	16	14	9	24	20	19
편차	-1	-3	-8	7	3	2

2 (1) 2 (2) -1 3 3개

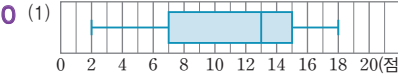
4 (1) $18, 3\sqrt{2}$ (2) $10, \sqrt{10}$ 5 (1) $10, \sqrt{10}$ (2) $7, \sqrt{7}$

6 (1) 1반 (2) 3반 7 ㄱ, ㄴ

8 (1) ○ (2) × (3) × (4) × (5) ○ (6) × (7) ○

9 (1) 225 mm (2) 280 mm (3) 250 mm (4) 235 mm

(5) 262.5 mm (6) 55 mm (7) 27.5 mm



(2) 약 75% (3) 13, 15

II (1) ○ (2) × (3) ○

12 (1) 20점 (2) 7명 (3) 3명 (4) 12.5% 13 ④

14 (1) 양 (2) 음 (3) 없다 (4) 음 (5) 없다 (6) 양

15 ㄱ, ㄴ, ㄹ

익힘북

2~12쪽 I. 삼각비

1 (1) ① $\frac{12}{13}$ ② $\frac{5}{13}$ ③ $\frac{12}{5}$

(2) ① $\frac{2}{3}$ ② $\frac{\sqrt{5}}{3}$ ③ $\frac{2\sqrt{5}}{5}$

(3) ① $\frac{5}{7}$ ② $\frac{2\sqrt{6}}{7}$ ③ $\frac{5\sqrt{6}}{12}$

(4) ① $\frac{\sqrt{6}}{4}$ ② $\frac{\sqrt{10}}{4}$ ③ $\frac{\sqrt{15}}{5}$

2 (1) ① $\frac{\sqrt{5}}{5}$ ② $\frac{2\sqrt{5}}{5}$ ③ $\frac{1}{2}$

(2) ① $\frac{\sqrt{5}}{3}$ ② $\frac{2}{3}$ ③ $\frac{\sqrt{5}}{2}$

(3) ① $\frac{\sqrt{6}}{3}$ ② $\frac{\sqrt{3}}{3}$ ③ $\sqrt{2}$

(4) ① $\frac{2\sqrt{3}}{5}$ ② $\frac{\sqrt{13}}{5}$ ③ $\frac{2\sqrt{39}}{13}$

3 (1) ① 15 ② $3\sqrt{21}$ (2) ① 4 ② $4\sqrt{2}$

(3) ① 6 ② $2\sqrt{13}$ (4) ① 10 ② 8

4 (1) ① $\frac{7}{25}$ ② $\frac{24}{25}$ (2) ① $\frac{\sqrt{7}}{4}$ ② $\frac{3\sqrt{7}}{7}$

(3) ① $\frac{\sqrt{3}}{3}$ ② $\sqrt{2}$ (4) ① $\frac{2\sqrt{10}}{11}$ ② $\frac{2\sqrt{10}}{9}$

5 (1) ① $\frac{\sqrt{3}}{2}, \frac{1}{2}, \sqrt{3}$ ② $\frac{1}{2}, \frac{\sqrt{3}}{2}, \frac{\sqrt{3}}{3}$

(2) ① $\frac{12}{13}, \frac{5}{13}, \frac{12}{5}$ ② $\frac{5}{13}, \frac{12}{13}, \frac{5}{12}$

6 (1) ① $\frac{4}{5}$ ② $\frac{3}{5}$ ③ $\frac{4}{3}$

(2) ① $\frac{\sqrt{3}}{2}$ ② $\frac{1}{2}$ ③ $\sqrt{3}$

7 (1) $\frac{3}{2}$ (2) $-\frac{\sqrt{3}}{6}$ (3) $\frac{3}{2}$ (4) $\sqrt{2}$

(5) 6 (6) 3 (7) $\frac{5\sqrt{2}}{2}$ (8) $\frac{3\sqrt{3}}{2}$

8 (1) ① $2\sqrt{2}$ ② $2\sqrt{2}$ (2) ① 10 ② 5

(3) ① $8\sqrt{3}$ ② $4\sqrt{3}$ (4) ① 6 ② $3\sqrt{2}$

(5) ① $2\sqrt{6}$ ② $3\sqrt{2}$

9 (1) ① $2\sqrt{3}$ ② 6 (2) ① $2\sqrt{3}$ ② $2\sqrt{6}$

(3) ① 10 ② $\frac{10\sqrt{3}}{3}$ (4) ① 4 ② $\frac{8\sqrt{3}}{3}$

10 (1) ㄱ, ㄹ, ㅁ (2) ㄴ, ㄹ (3) ㄷ

11 (1) 0.5878 (2) 0.8090 (3) 0.7265 (4) 0.8090

(5) 0.5878

12 (1) 0 (2) $\sqrt{3}$ (3) $\sqrt{2}$ (4) $\frac{1}{2}$

(5) 1 (6) 0 (7) $\frac{\sqrt{3}}{3}$ (8) $-\frac{7\sqrt{3}}{3}$

13 (1) 0.4067 (2) 0.9336 (3) 0.9205 (4) 0.4040

14 (1) 69° (2) 71° (3) 68° (4) 70°

15 (1) ① $6\cos 42^\circ$ ② $6\sin 42^\circ$

(2) ① $\frac{9}{\tan 63^\circ}$ ② $\frac{9}{\sin 63^\circ}$

(3) ① $13\tan 37^\circ$ ② $\frac{13}{\cos 37^\circ}$

16 $6\sqrt{3}$ m 17 84m 18 14.5m 19 28.82m

20 (1) $4\sqrt{7}$ (2) 5 (3) $2\sqrt{7}$ (4) $2\sqrt{14}$

21 $5\sqrt{5}$ m 22 $4\sqrt{7}$ km

23 (1) 6 (2) $3\sqrt{6}$ (3) $8\sqrt{2}$ (4) $4\sqrt{6}$

24 $200\sqrt{6}$ m 25 $2\sqrt{2}$ km

26 (1) $\sqrt{3}-1$ (2) $3\sqrt{3}$

27 $50(3-\sqrt{3})$ m

28 (1) $4(3+\sqrt{3})$ (2) $7(\sqrt{3}+1)$

29 $2\sqrt{3}$ km

30 (1) 14 (2) $24\sqrt{3}$ (3) 60 (4) 9 (5) $36\sqrt{3}$

31 (1) $\frac{27}{2}$ (2) 15 (3) 9 (4) $\frac{15\sqrt{6}}{2}$ (5) $2\sqrt{3}$

32 (1) $16\sqrt{3}$ (2) $\frac{23}{2}$ (3) $14\sqrt{3}$ (4) $10+25\sqrt{3}$

33 (1) 54 (2) 48

34 (1) $25\sqrt{2}$ (2) 6

13~24쪽 II. 원의 성질

1 (1) 24 (2) 7

2 (1) $4\sqrt{7}$ (2) $6\sqrt{3}$ (3) $2\sqrt{13}$ (4) 6 (5) 6 (6) $\frac{25}{6}$

3 (1) 7 (2) 5 (3) 6 (4) 5

4 (1) $4\sqrt{3}$ (2) 4

5 (1) 63° (2) 40°

6 (1) 115° (2) 40°

7 (1) 7 (2) 5

8 (1) 66° (2) 58°

9 (1) 4 (2) 2 (3) $\frac{21}{2}$

10 (1) 38 (2) 34

11 (1) 10 (2) 7 (3) 4 (4) 9

12 (1) 2 (2) 4

13 (1) 6 (2) 4 (3) 2 (4) $\frac{25}{2}$

14 (1) 52 (2) 28

15 (1) 10 (2) 2 (3) 21

16 (1) 54° (2) 120° (3) 80° (4) 210° (5) 130°

17 (1) 49° (2) 100° (3) 75° (4) 50° (5) 42° (6) 39°

18 (1) 25° (2) 65° (3) 66° (4) 38° (5) 27° (6) 47°

19 (1) 35° (2) 44° (3) 25° (4) 70°

20 (1) 4 (2) 13 (3) 8 (4) 15

21 (1) 40° (2) 36° (3) 50° (4) 40°

22 (1) 24 (2) 21 (3) 20 (4) 26

23 ㄱ, ㄹ, ㅁ

24 (1) 80° (2) 25° (3) 45°

25 (1) 95° (2) 120° (3) 40° (4) 115° (5) 118° (6) 70°

(7) 105° (8) 220°

26 ㄱ, ㄹ, ㅁ

27 (1) 76° (2) 85° (3) 43°

28 (1) 110° (2) 55° (3) 50° (4) 37° (5) 55°

29 (1) 80° (2) 60° (3) 41°

30 (1) 71° (2) 36°

25~31쪽 III. 통계

1 (1)

변량	9	7	20	2	17
편차	-2	-4	9	-9	6

(2)

변량	85	80	60	68	35	62
편차	20	15	-5	3	-30	-3

2 (1) 20 /

변량	16	22	19	25	18
편차	-4	2	-1	5	-2

(2) 40 /

변량	33	38	45	29	46	49
편차	-7	-2	5	-11	6	9

(3) 81 /

변량	71	80	77	95	85	78
편차	-10	-1	-4	14	4	-3

3 (1) -12 (2) -4 (3) 7

4 14일 5 31회

6 분산: 9.2, 표준편차: $\sqrt{9.2}$ 분

7 분산: $\frac{64}{3}$, 표준편차: $\frac{8\sqrt{3}}{3}$ 시간

8 분산: 32, 표준편차: $4\sqrt{2}$ g

9 분산: 6, 표준편차: $\sqrt{6}$ °C

10 분산: 8, 표준편차: $2\sqrt{2}$ 회

11 분산: 10, 표준편차: $\sqrt{10}$ 점

12 (1) 만철 (2) 덕환

13 (1) ㄷ (2) ㄱ (3) ㄷ

14 (1) 3반 (2) 1반

15 (1) × (2) ○ (3) × (4) ○ (5) ×