

0451 18 0452 ③ 0453 ① 0454 $4\sqrt{3}$ 0455 $4\sqrt{2}\pi$

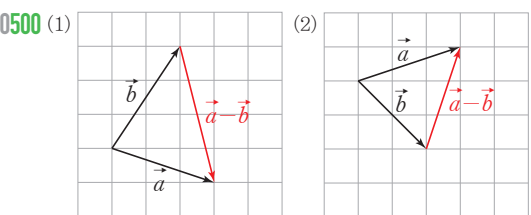
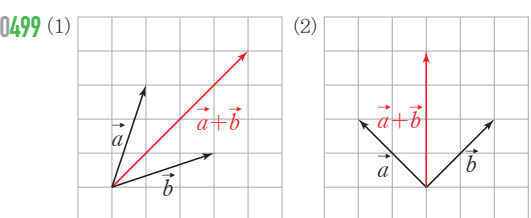
0456 ④ 0457 ② 0458 $\frac{128}{3}\pi$ 0459 $\sqrt{6}$ 0460 ⑤
 0461 31 0462 $2\sqrt{2}\pi$ 0463 $8\sqrt{6}$ 0464 256 0465 ④
 0466 $3\sqrt{2}$
 0467 ④ 0468 ② 0469 $(\frac{1}{12}, 0, \frac{1}{4})$ 0470 ④ 0471 ④
 0472 $\frac{34}{5}$ 0473 $(-\frac{1}{6}, \frac{2}{3}, -\frac{3}{4})$ 0474 ② 0475 ①
 0476 $2\sqrt{5}$ 0477 ③ 0478 ③ 0479 ⑤ 0480 ②
 0481 $5\sqrt{2}-3$ 0482 -1
 0483 $(x-3)^2+(y+2)^2+z^2=12$ 0484 3π
 0485 ③ 0486 $\frac{\sqrt{5}}{3}$ 0487 $3\sqrt{5}$ 0488 48π

05 / 벡터의 연산 82~97쪽

0489 시점: P, 종점: Q 0490 시점: D, 종점: A

0491 2 0492 $2\sqrt{5}$ 0493 $2\sqrt{2}$ 0494 $2\sqrt{3}$ 0495 $\vec{f}, \vec{h}$

0496 $\vec{f}, \vec{g}, \vec{i}$ 0497 $\vec{f}$ 0498 $\vec{i}$



0501 $\vec{AD}$ 0502 $\vec{0}$ 0503 $\vec{AE}$ 0504 $-\vec{a}+\vec{b}$
 0505 $-\vec{b}+\vec{c}$ 0506 $\vec{a}-\vec{c}$ 0507 $2\vec{a}+3\vec{b}$
 0508 $-\vec{a}-5\vec{b}$ 0509 $5\vec{a}-\vec{b}$ 0510 $2\vec{a}-10\vec{b}$
 0511 $\vec{a}+7\vec{b}+4\vec{c}$ 0512 $\vec{a}-4\vec{b}+2\vec{c}$ 0513 $\vec{x}=\vec{a}+\frac{3}{2}\vec{b}$

0514 $\vec{x}=\frac{5}{2}\vec{a}+2\vec{b}$ 0515 $\vec{x}=-\frac{1}{2}\vec{a}+2\vec{b}$

0516 $\vec{x}=-7\vec{a}+7\vec{b}$ 0517 $\neg$ 과 $\sqsubset$, $\sqsupset$ 과 $\sqsupset$

0518 $m=2, n=\frac{5}{3}$ 0519 $m=1, n=3$ 0520 -2

0521 (1) $-2\vec{a}+\vec{b}$ (2) $-8\vec{a}+4\vec{b}$ (3) 풀이 참조

0522 $4\sqrt{3}+8$ 0523 2 0524 16 0525 ① 0526 ③
 0527 $\vec{CE}, \vec{EB}, \vec{FD}$ 0528 4 0529 ① 0530 $\sqsubset, \sqsupset$
 0531 $\neg, \sqsubset, \sqsupset$ 0532 ⑤ 0533 ⑤ 0534 ⑤
 0535 평행사변형 0536 시속 25 km 0537 ⑤ 0538 2
 0539 ④ 0540 ⑤ 0541 $\sqsubset, \sqsupset$ 0542 $-\frac{1}{2}$

0543 ① 0544 $-\frac{\sqrt{3}}{4}$ 0545 $6\vec{a}+2\vec{b}$ 0546 $\frac{1}{2}$

0547 ③ 0548 $\frac{1}{2}$ 0549 $\frac{1}{2}\vec{a}+\frac{1}{2}\vec{c}$ 0550 $\neg, \sqsubset$

0551 ⑤ 0552 $8\sqrt{3}$ 0553 ③ 0554 40 0555 ① 0556 ③

0557 ② 0558 $-\frac{1}{4}$ 0559 ⑤ 0560 7 0561 ②

0562 $\neg, \sqsupset$ 0563 4 0564 3 0565 ⑤ 0566 C, E

0567 ④ 0568 $\frac{3}{2}$

0569 ④ 0570 $\sqsubset, \sqsupset, \sqsupset$ 0571 ⑤ 0572 ⑤

0573 $\vec{a}+\vec{b}-\vec{c}$ 0574 ④ 0575 ③ 0576 4 0577 ①

0578 ③ 0579 $6\sqrt{3}$ 0580 11 0581 ④ 0582 -2 0583 ③

0584 5 0585 9 0586 -2

0587 4 0588 $\frac{3}{5}$ 0589 $\frac{\pi}{3}$ 0590 ⑤

06 / 벡터의 성분과 내적 98~117쪽

0591 $-\vec{a}+2\vec{b}-\vec{c}$ 0592 $-2\vec{a}-2\vec{b}+4\vec{c}$

0593 $\frac{5}{8}\vec{a}+\frac{3}{8}\vec{b}$ 0594 $\frac{\vec{a}+\vec{b}}{2}$

0595 $\frac{\vec{a}+\vec{b}+\vec{c}}{3}$ $(\neg) \vec{c}-\vec{g}$ $(\neg) 3$ 0596 $(-3, 0)$

0597 $(4, -7)$ 0598 $(-2, -5)$ 0599 $\sqrt{10}$ 0600 10

0601 $m=-5, n=4$ 0602 $m=-1, n=1$

0603 $(-3, 10)$ 0604 $(-11, 10)$ 0605 $(-14, 4)$

0606 $\vec{AB}=(-1, 3), |\vec{AB}|=\sqrt{10}$

0607 $\vec{AB}=(-3, 3), |\vec{AB}|=3\sqrt{2}$ 0608 $(0, 1, 2)$

0609 $(1, -3, 2)$ 0610 $l=7, m=-3, n=2$

0611 $l=-1, m=3, n=3$ 0612 $(6, -4, 11)$

0613 $(5, 14, -6)$ 0614 $(-7, -2, -7)$

0615 $\vec{AB}=(-4, 4, 2), |\vec{AB}|=6$

0616 $\vec{AB}=(5, -4, 2), |\vec{AB}|=3\sqrt{5}$ 0617 $3\sqrt{3}$

0618 $-3\sqrt{2}$ 0619 -11 0620 6 0621 $\frac{3}{5}$

0622 $\frac{\sqrt{2}}{6}$ 0623 60° 0624 150° 0625 (1) 1 (2) $-\frac{1}{2}$

0626 $-\frac{5}{9}\vec{a}+\frac{2}{9}\vec{b}$ 0627 $\frac{15}{64}$ 0628 3 0629 1

0630 $-\frac{2}{5}\vec{a}-\frac{3}{5}\vec{b}+\vec{c}$ 0631 $\frac{20}{17}$ 0632 ②

0633 $\vec{a}+2\vec{b}$ 0634 $\frac{2}{15}\vec{a}+\frac{1}{3}\vec{b}+\frac{1}{3}\vec{c}+\frac{1}{5}\vec{d}$ 0635 $\frac{7}{6}$

0636 ③ 0637 8 0638 ③ 0639 $\sqrt{10}$ 0640 14 0641 ④

0642 6 0643 $4\sqrt{3}$ 0644 ② 0645 ⑤ 0646 ④ 0647 $8\sqrt{2}$

0648 ③ 0649 ③ 0650 ⑤ 0651 21 0652 ② 0653 ⑤

0654 ① 0655 $-\frac{2}{3}$

0656 $\vec{b}=(-\sqrt{5}, 2\sqrt{5}), \vec{c}=(\sqrt{5}, -2\sqrt{5})$ 0657 27

0658 $(\frac{4}{5}, \frac{3}{5})$ 0659 ④ 0660 $\sqrt{5}$ 0661 10 0662 ③

0663 -1 0664 6 0665 5 0666 -6 0667 $3\sqrt{5}$ 0668 ①

0669 -1 0670 ② 0671 ③ 0672 170 0673 ② 0674 $3\sqrt{5}$

0675 $\sqrt{13}$ 0676 48π 0677 $x+y-1=0$ 0678 ① 0679 15

0680 8 0681 12 0682 $12\sqrt{3}$ 0683 $\neg, \sqsupset$

0684 4 0685 4 0686 -10 0687 2 0688 5

0689 -6 0690 -16 0691 ④ 0692 5 0693 $\frac{52}{5}$

0694 ③ 0695 7 0696 -4 0697 ④ 0698 ② 0699 45°

0700 ③ 0701 $\frac{4}{5}$ 0702 $\frac{1}{3}$ 0703 60° 0704 ⑤ 0705 $\frac{1}{5}$

0706 120° 0707 ③ 0708 12 0709 $(0, 8, 6)$ 0710 1

0711 $\frac{7}{10}$ 0712 ④ 0713 20 0714 ③ 0715 $6\sqrt{2}$ 0716 ③

0717 6 0718 4 0719 ④ 0720 2 0721 ⑤ 0722 $\frac{32}{5}$

0723 4 0724 -6 0725 $\frac{\sqrt{3}}{2}$ 0726 60° 0727 ⑤ 0728 $\frac{1}{2}$

0729 5 0730 16

0731 $\frac{36}{5}$ 0732 $\frac{1}{4}$ 0733 ① 0734 $\frac{\sqrt{5}}{5}$

07 / 도형의 방정식 118~137쪽

0735 $\frac{x-1}{3}=2-y$ 0736 $\frac{x+2}{4}=\frac{y-3}{5}$ 0737 $x=-1$

0738 $-x-2=\frac{y-1}{2}=\frac{z}{3}$ 0739 $\frac{x-1}{2}=\frac{y-2}{-7}=\frac{z-3}{4}$

0740 $y=-1, z=4$ 0741 $x-3=\frac{y-5}{9}$ 0742 $\frac{x+1}{4}=\frac{y-4}{-7}$

0743 $\frac{x-1}{2}=\frac{y+1}{3}=\frac{z-2}{3}$ 0744 $\frac{x-2}{-2}=\frac{y+1}{5}=\frac{z+3}{-4}$

0745 $\frac{4}{5}$ 0746 $\frac{\sqrt{5}}{5}$ 0747 $\frac{\sqrt{2}}{3}$ 0748 $\frac{11}{14}$ 0749 45° 0750 60°

0751 (1) 3 (2) -1 0752 (1) 4 (2) 1

0753 $2x-y-4z+8=0$ 0754 $x-3y+2z-1=0$

0755 $3x+y-2z+2=0$ 0756 $y=-2$

0757 $z=-3$ 0758 $\frac{\sqrt{3}}{6}$ 0759 $\frac{4}{9}$ 0760 $\frac{4}{21}$ 0761 30°

0762 60° 0763 3 0764 4 0765 $\frac{5}{6}$ 0766 4 0767 2

0768 $\sqrt{11}$ 0769 $\frac{\sqrt{14}}{2}$

0770 점 $(5, -1, 3)$ 을 중심으로 하고 반지름의 길이가 4인 구

0771 점 $(5, -1, 3)$ 을 중심으로 하고 반지름의 길이가 3인 구

0772 ④ 0773 -15 0774 $(7, -8, 0)$ 0775 $\frac{25}{12}$

0776 ③ 0777 ① 0778 ③ 0779 ② 0780 9 0781 ②

0782 $2\sqrt{6}$ 0783 -5 0784 $\frac{10}{3}$ 0785 ⑤ 0786 60° 0787 $\frac{3\sqrt{14}}{7}$

0788 -12 0789 ④ 0790 ② 0791 6 0792 ④

0793 $(-\frac{1}{3}, \frac{2}{3}, -\frac{1}{3})$ 0794 $\frac{\sqrt{70}}{2}$ 0795 ③

0796 P(1, 1, -1), Q(3, 2, -3) 0797 1 0798 ②

0799 5 0800 $(-7, 0, 0)$ 0801 ③

0802 $\frac{x-2}{4}=\frac{y-3}{3}=\frac{z-2}{-7}$ 0803 ④ 0804 -5 0805 ⑤

0806 ① 0807 ③ 0808 $\frac{8}{5}$ 0809 $\frac{3}{4}$ 0810 ③ 0811 2

0812 ① 0813 11 0814 $(4, 1, 5)$ 0815 ③ 0816 ⑤

0817 8 0818 3 0819 $\frac{2}{3}$ 0820 17 0821 -8 0822 ②

0823 30° 0824 ③ 0825 $\sqrt{2}$ 0826 12 0827 ④

0828 $(11, 6, 0)$ 0829 ⑤ 0830 $\frac{14}{3}$

0831 $2x+y+2z-9=0$ 0832 $3\sqrt{10}$ 0833 ③

0834 ② 0835 $\frac{4}{3}$ 0836 ② 0837 4 0838 ③

0839 $2x+3y+6z-6=0, 2x+3y+6z+8=0$ 0840 ②

0841 ⑤ 0842 $(3, 0, -1)$ 0843 ① 0844 20

0845 $32\sqrt{3}\pi$ 0846 ⑤ 0847 6

0848 $(-3, 0, 2)$ 0849 ⑤ 0850 $\frac{x-7}{-8}=\frac{y+7}{8}=\frac{z+3}{5}$

0851 ⑤ 0852 1 0853 $6\sqrt{3}$ 0854 ③ 0855 2 0856 ④

0857 ① 0858 ② 0859 $2\sqrt{6}$ 0860 $(7, 2, -3)$

0861 $4y-2z+1=0, 2x+2y+4z-5=0$ 0862 ④

0863 ④ 0864 $6-\sqrt{6}$ 0865 $-3\sqrt{5}$

0866 $x=\frac{y+12}{3}, z=3$ 0867 -8

0868 -3 0869 5 0870 ② 0871 ②

기출 BOOK

01 / 이차곡선 2~7쪽

1회 1 ① 2 $y^2=-18x$ 3 -4 4 ③ 5 ⑤ 6 6

7 ⑤ 8 48 9 ⑤ 10 ① 11 40 12 ⑤

13 $y=\pm\frac{2\sqrt{5}}{5}x$ 14 3 15 ④ 16 ⑤ 17 16 18 $3\sqrt{7}\text{m}$

19 7 20 ②

2회 1 ① 2 34 3 ⑤ 4 $20\sqrt{6}$ 5 ③ 6 11 7 ②

8 ③ 9 21 10 $6\sqrt{5}$ 11 ⑤ 12 30 13 ① 14 ④ 15 ④

16 $(\sqrt{39}, 4)$ 17 ④ 18 ② 19 $\frac{x^2}{625}-\frac{y^2}{1875}=1$ 20 -4

02 / 이차곡선의 접선 8~13쪽

1회 1 ④ 2 20 3 ③ 4 1 5 $-\frac{4}{3}$ 6 ② 7 ③

8 10 9 ③ 10 -4 11 2 12 ⑤ 13 $\frac{16}{3}$ 14 ② 15 ③

16 1 17 ⑤ 18 10 19 ① 20 ④

03 / 공간도형 14~19쪽

2회 1 -4 2 ④ 3 ② 4 $(4, 4\sqrt{2})$ 5 ③ 6 8

7 ① 8 9 9 ③ 10 ① 11 ② 12 45 13 ② 14 3

15 2 16 ② 17 ⑤ 18 ③ 19 $\sqrt{2}$ 20 ⑤

04 / 공간좌표 20~25쪽

1회 1 7 2 ④ 3 7 4 ⑤ 5 ④ 6 45° 7 ②

8 ③ 9 ③ 10 $2\sqrt{6}$ 11 $\frac{7\sqrt{58}}{58}$ 12 ④ 13 45°

14 $4\sqrt{19}$ 15 $6\sqrt{2}\pi$ 16 $\frac{2\sqrt{21}}{21}$ 17 ③

18 $\frac{16\sqrt{5}}{5}$ 19 ② 20 ④

2회 1 ④ 2 11 3 ④ 4 $\frac{2\sqrt{6}}{3}$ 5 60° 6 $\frac{\sqrt{2}}{4}$ 7 ⑤

8 ② 9 $8\sqrt{2}$ 10 30° 11 30° 12 $\frac{\sqrt{3}}{3}$ 13 ② 14 16 15 $\frac{3}{2}$

16 ⑤ 17 ⑤ 18 ④ 19 $9\sqrt{2}\pi$ 20 $\frac{\sqrt{2}}{4}\pi$

2회 1 ⑤ 2 $\frac{16}{3}$ 3 ④ 4 3 5 60° 6 ② 7 1

8 $(2, 1, 3)$ 9 ① 10 $\frac{1}{2}$ 11 ① 12 ④ 13 ② 14 3

15 $\frac{3\sqrt{2}}{2}$ 16 $(3, \frac{3}{2}, 3)$ 17 $3\sqrt{14}$ 18 ①

19 $2x+y+2z-9=0$ 20 ③

05 / 벡터의 연산 26~31쪽

1회 1 $6+3\sqrt{3}$ 2 ③ 3 $\vec{EC}, \vec{FB}, 2\sqrt{2}$ 4 ⑤

5 $\vec{a}-\vec{b}+\vec{c}$ 6 ④ 7 ⑤ 8 ④ 9 2 10 $\frac{4}{3}$ 11 2