

【】 放物線と直線

【】 面積

[解答 1](1) A(-2, 4) B(3, 9) (2) 15

[解答 2](1) A(6, 12) B(-3, 3) (2) 27

[解答 3](1) B(-2, 2) (2) $y = x + 4$ (3) 12

[解答 4](1) $a = \frac{1}{2}$ (2) (4, 0) (3) 12

[解答 5](1) $y = 3x + 12$ (2) $a = \frac{3}{2}$ (3) 36

[解答 6](1) $y = 2x + 4$ (2) 9

[解答 7](1) $a = \frac{1}{2}$ (2) $y = x + 4$ (3) 12 (4) $\left(3, \frac{9}{2}\right)$

[解答 8](1) 9 倍 (2) (3, 9)

【】 面積の二等分

[△OAB の面積を二等分]

[解答 9] $y = -5x$

[解答 10](1) $a = \frac{1}{2}$ (2) $y = 5x$

[解答 11](1) $a = 1$ (2) $y = -2x + 3$ (3) 6 cm^2 (4) $y = -5x$

[その他の三角形の面積の二等分]

[解答 12](1) $a = 2$ (2) $y = x + 3$

[解答 13](1) $a = 1$ (2) $y = 2x + 8$ (3) 24 (4) $y = \frac{8}{3}x + \frac{16}{3}$

[台形の面積の二等分]

[解答 14](1) $a = 1$ (2) $y = x + 6$ (3) $\left(\frac{25}{12}, \frac{97}{12}\right)$

【】等積変形

[解答 15](1, 1)

[解答 16](1) $(-2, 4)$ (2) $y = -x + 2$ (3) $x = -1$

[解答 17](1) $a = \frac{1}{3}$ (2) $y = x + 6$ (3) $t = 2$

[解答 18] $a = \frac{10}{13}$

[解答 19](1) $b = 2a$ (2) $x = 2$ (3) $a = 1$ $b = 2$ (4) (1, 1)

【】線分比と面積比

[解答 20](1) $a = \frac{1}{3}$ $b = 2$ (2) $(-6, 0)$ (3) $5 : 4$

[解答 21](1) $(-3, 3)$ (2) $(6, 12)$ (3) $y = x + 6$ (4) $1 : 3$

[解答 22](1) $a = 1$ (2) $y = 2x + 8$ (3) $\frac{3}{4}$ 倍

[解答 23](1) $y = -x + 4$ (2) $(2\sqrt{2}, 4)$ (3) $y = \frac{5}{3}x + \frac{20}{3}$

【】正方形・平行四辺形など

[正方形]

[解答 24](4, 8)

[解答 26](1) $(2a, 2a^2)$ (2) $\left(\frac{2}{3}, \frac{8}{9}\right)$

[解答 27](2, 1)

[解答 28] $a = \frac{2}{3}$

[平行四辺形]

[解答 29](1) $A(6, 12)$ $B(-3, 3)$ (2) $(3, 15)$

[解答 30](1) $a = -2$ (2) $(2, 5)$ (3) $y = -\frac{3}{2}x + 4$

[解答 31] $(-\sqrt{5}, 5)$

[解答 32] $a = \frac{1}{3}$

[解答 33] 3

【】 いろんな事象と関数

【】 動点の問題

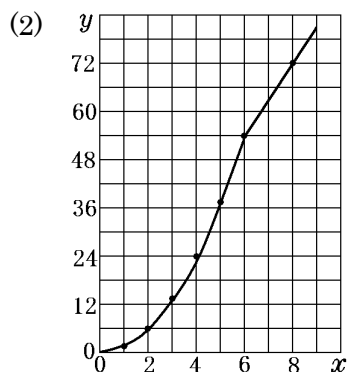
[解答 34](1) $y = x^2$ ② $0 \leq x \leq 10$ (2) $2\sqrt{3}$ 秒後

[解答 35](1) $y = 3x^2$ (2) 5 秒後

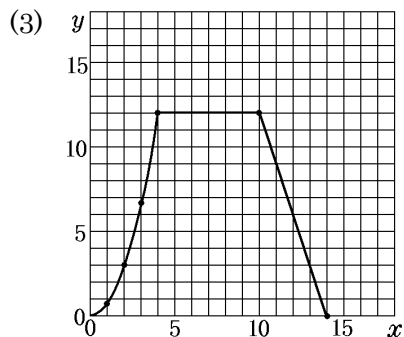
[解答 36](1)①式: $y = x^2$ 変域: $0 \leq x \leq 4$ ②式: $y = 4x$ 変域: $4 \leq x \leq 8$

(2) 6 秒後

[解答 37](1)① $y = \frac{3}{2}x^2$ ② $y = 9x$

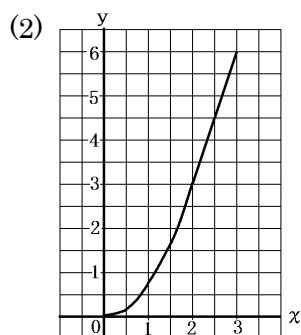


[解答 38](1)① $y = \frac{3}{4}x^2$ ② $y = 12$ ③ $y = -3x + 42$ (2) 12cm^2

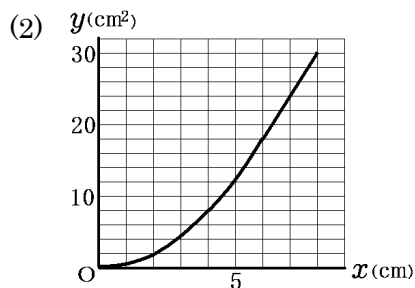


[解答 39](1)① $y = x^2$, $0 \leq x \leq 3$ ② $y = 3x$, $3 \leq x \leq 8$ (2) 12cm^2

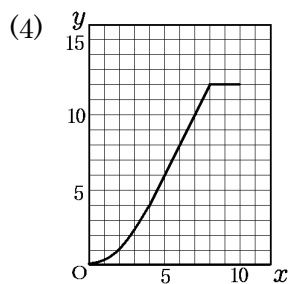
[解答 40](1)① $y = \frac{3}{4}x^2$ ② $y = 3x - 3$



[解答 41](1) $0 \leq x \leq 6$: $y = \frac{1}{2}x^2$ $6 < x \leq 8$: $y = 6x - 18$ (3) $\frac{19}{3}\text{cm}$



[解答 42](1) $y = 1$ (2) $0 < x \leq 4$ (3) $y = 8$



[解答 43](1) $y = \frac{1}{4}x^2$ (2) 8m (3) Aの方が 3m/s 速い。

【】 落下運動・制動距離など

[落下運動]

[解答 44](1) $y = 5x^2$ (2) 125m (3) 9 秒

[解答 45]10 秒

[解答 46](1) $a = \frac{1}{4}$ (2) 2m/s (3) 8 秒後 (4) 12m

[制動距離]

[解答 47] $y = \frac{1}{160}x^2$

[解答 48](1) $y = \frac{1}{125}x^2$ (2) 時速 $50\sqrt{3}$ km

[解答 49](1) $y = \frac{2}{225}x^2$ (2) 時速 67km

【】 いろいろな関数

[解答 50](1) 500 円 (2) 600 円

[解答 51](1) 500 円 (2) 900 円 (3) イ

[解答 52](1) いえる (2) 120cm