

〈解答〉

- ① (1) 9 (2) 36 (3) -12 (4) -4 (5) -1 (6)  $-\frac{29}{35}$   
 (7) -0.5 (8) 0.35 (9) -2
- ② (1) 8 (2) 12 (3) -12 (4) 63 (5) 32 (6)  $-\frac{1}{2}$   
 (7)  $-\frac{4}{15}$  (8) -0.48 (9) 0.036 (10) 350 (11) 120 (12) 72
- ③ (1) 3 (2) -2 (3) -3 (4) 6 (5)  $-\frac{2}{3}$  (6) -5  
 (7) 8 (8) -2 (9) 2
- ④ (1) -18 (2) 23 (3) -12 (4) 4 (5) -0.63 (6)  $\frac{1}{3}$   
 (7) 12 (8) 1 (9) 4
- ⑤ (1) -8 (2)  $-\frac{10}{3}$  (3) -18
- ⑥ (1)  $90a + 60b$  (円) (2)  $4x$  (km) (3)  $\frac{x+y+z}{3}$  (kg)  
 (4)  $\frac{3}{10}x$  (人) (5)  $\frac{1}{2}ab$  (cm<sup>2</sup>) (6)  $\frac{3}{4}a - 50$  (円)

配点 各1点 48点満点

〈解説〉

- ② (10)  $7 \times (-2) \times (-25)$   
 $= 7 \times 50$   
 $= 350$
- (11)  $3 \times (-2) \times 4 \times (-5)$   
 $= (-6) \times (-20)$   
 $= 120$
- (12)  $(-2)^3 \times (-3^2)$   
 $= (-2) \times (-2) \times (-2) \times (-3 \times 3)$   
 $= (-8) \times (-9)$   
 $= 72$
- ③ (5)  $(+\frac{10}{3}) \div (-5)$   
 $= -\frac{10}{3} \times \frac{1}{5}$   
 $= -\frac{2}{3}$
- (6)  $(+4) \div (-\frac{4}{5})$   
 $= -4 \times \frac{5}{4}$   
 $= -5$
- (8)  $-1 \div 8 \times (-4)^2$   
 $= -1 \times \frac{1}{8} \times 16$   
 $= -2$

$$\begin{aligned}
 (11) \quad & 3 \div (-3)^2 \times 6 \\
 & = 3 \times \frac{1}{9} \times 6 \\
 & = 2
 \end{aligned}$$

$$\begin{aligned}
 \boxed{4} \quad (1) \quad & 5 \times (-6) + 12 \\
 & = -30 + 12 \\
 & = -18
 \end{aligned}$$

$$\begin{aligned}
 (2) \quad & 18 - 15 \div (-3) \\
 & = 18 + 5 \\
 & = 23
 \end{aligned}$$

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

$$\begin{aligned}
 (4) \quad & 7 - (-5) \div (-5) \times 3 \\
 & = 7 - (+1) \times 3 \\
 & = 7 - (+3) \\
 & = 7 - 3 \\
 & = 4
 \end{aligned}$$

$$\begin{aligned}
 (5) \quad & 1.2 \times (-0.4) + 0.3 \times (-0.5) \\
 & = -0.48 - 0.15 \\
 & = -0.63
 \end{aligned}$$

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

$$\begin{aligned}
 (7) \quad & 3 \times 4^2 - 36 \\
 & = 3 \times 16 - 36 \\
 & = 48 - 36 \\
 & = 12
 \end{aligned}$$

$$\begin{aligned}
 (8) \quad & 51 + 5^2 \times (-2) \\
 & = 51 + 25 \times (-2) \\
 & = 51 - 50 \\
 & = 1
 \end{aligned}$$

$$\begin{aligned}
 (9) \quad & 7 \times (-4) - (-2) \times 4^2 \\
 & = -28 - (-2) \times 16 \\
 & = -28 - (-32) \\
 & = 4
 \end{aligned}$$

$$\boxed{6} \quad (2) \quad (\text{道のり}) = (\text{速度}) \times (\text{時間})$$

(4) 割合の3割を分数で表すと $\frac{3}{10}$ だから、 $x \times \frac{3}{10}$ と表せる。よって、 $\frac{3}{10}x$ もしくは $0.3x$ となる。

$$(5) \quad (\text{三角形の面積}) = (\text{底辺}) \times (\text{高さ}) \div 2$$

(6) 25%引きなので $100 - 25 = 75(\%)$ の金額になる。 $a \times \frac{75}{100} - 50 = \frac{3}{4}a - 50$ (円)となる。