

1	(1)	400 (cm)	(2)	30000 (mL)	(3)	194.6 (kg)	(4)	20 (本)
	(5)	1080 (度)	(6)	360 (度)				

2	(1)	6000 円	(2)	800 円	(3)	20400 円	(4)	15 g
	(5)	8 %	(6)	200 g				

3	(1)	16 日	(2)	4 日	(3)	4 分後	(4)	44
	(5)	5.6 点	(6)	1 月 3 日				

4	(1)	⑦ 41 度	(2)	① 105 度	(3)	② 156 度	(4)	④ 56 度

5	(1)	108 cm ²	(2)	56 cm ²	(3)	75.36 cm ²	(4)	36.48 cm ²
	(5)	36.56 cm ²	(6)	74.94 cm ²				

6	(1)	30 cm ²	(2)	17.5 cm ²

7	(1)	20 : 16 : 25	(2)	25 : 16	(3)	45 : 16

8	(1)	図形 イ, エ, オ, ク	(2)	図形 イ, ク	(1)(2); 各完答, 順不同

9	(1)	20 分前	(2)	7 時 27 分	(3)	75 度	(4)	25.12 cm ²

10	(1)	3 : 8	(2)	2 : 3	(3)	9 %

(配点) ①~⑥ 各2点×30
 ⑦, ⑧, ⑩ 各3点×8
 ⑨ 各4点×4

1

(3) $(6.4\text{kg} + 3400\text{g}) \times 27 - 0.07\text{t}$
 $= (6.4\text{kg} + 3.4\text{kg}) \times 27 - 70\text{kg}$
 $= \underline{194.6(\text{kg})}$

(4) $(8 - 3) \times 8 \div 2 = \underline{20(\text{本})}$

(5) $180 \times (8 - 2) = \underline{1080(\text{度})}$

(6) 正角形であっても、外角の和は360度。

2

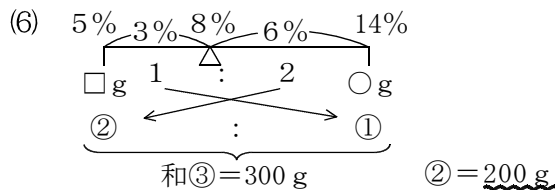
(1) $4000 \times 1.5 = \underline{6000(\text{円})}$

(2) $640 \div (1 - 0.2) = \underline{800(\text{円})}$

(3) $200 \times 600 = 120000(\text{円})$ …総仕入れ額
 $200 \times (1 + 0.2) = 240(\text{円})$ …定価
 $240 \times (1 - 0.1) = 216(\text{円})$ …2日目の売値
 $240 \times 450 + 216 \times (600 - 450) = 140400(\text{円})$ …総売り上げ
 $140400 - 120000 = \underline{20400(\text{円})}$

(4) $250 \times 0.06 = \underline{15(\text{g})}$

(5) $\frac{14}{200 \mid 0.07} + \frac{10}{100 \mid 0.1} = \frac{24}{300 \mid \square}$
 $\square = 24 \div 300 = 0.08 \rightarrow \underline{8\%}$



3

(1) $\text{LCM}(24, 48) = 48$ …仕事全体
 $48 \div 24 = 2$ (日)…A $48 \div 48 = 1$ (日)…B
 $48 \div (2 + 1) = \underline{16(\text{日})}$

(2) $1 \times 10 \times 16 = 160$ …仕事全体
 $1 \times 40 \times \square = 160$
 $\square = 160 \div 40 = \underline{4(\text{日})}$

(3) $120 \div (80 - 50) = \underline{4(\text{分後})}$

(4) $B - A = 27$ で一定。
 ㊦; $3 + 27 = 30$ ㊧; $41 - 27 = 14 \rightarrow 30 + 14 = \underline{44}$

(5) $1 + 3 + 5 + 8 + 5 + 2 = 24(\text{人})$
 $(2 \times 3 + 4 \times 5 + 6 \times 8 + 8 \times 5 + 10 \times 2) \div 24$
 $= 5.58$ …(点) \rightarrow よって、5.6点。

(6) 100日目 \rightarrow 99日後
 $9/26 + 99 = 9/125 = 10/95 = 11/64 = 12/34 = \underline{1/3}$

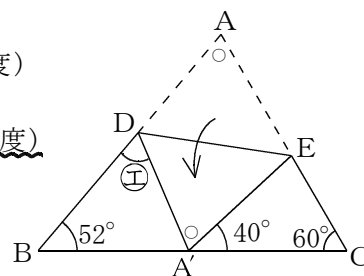
4

(1) ㊦ $48 + 28 - 35 = \underline{41(\text{度})}$

(2) ㊧ $60 + 45 = \underline{105(\text{度})}$

(3) ㊨ $36 \times 2 + 42 \times 2 = \underline{156(\text{度})}$

(4) ㊩ \bigcirc ; $180 - (52 + 60) = 68(\text{度})$
 $52 + \text{㊩} = 68 + 40$
 $\text{㊩} = 68 + 40 - 52 = \underline{56(\text{度})}$



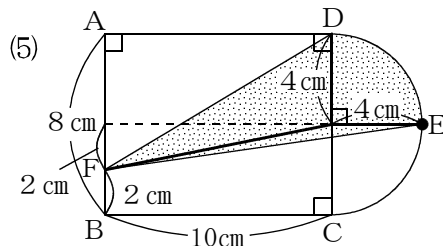
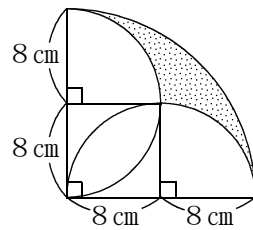
5

(1) $9 \times 12 = \underline{108(\text{cm}^3)}$

(2) 30度問題。 $14 \times 16 \div 4 = \underline{56(\text{cm}^2)}$

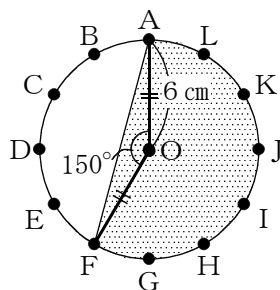
(3) $12 \times 12 \times \pi \times \frac{1}{6} = 24 \times \pi = \underline{75.36(\text{cm}^2)}$

(4) $16 \times 16 \times \pi \times \frac{1}{4} - 8 \times 8 \times \pi \times \frac{1}{4} \times 2$
 $- 8 \times 8 = 32 \times \pi - 64 = \underline{36.48(\text{cm}^2)}$



$4 \times 4 \times \pi \times \frac{1}{4} + 4 \times 10 \div 2 + 4 \times 2 \div 2$
 $= 4 \times \pi + 20 + 4 = \underline{36.56(\text{cm}^2)}$

(6) $6 \times 6 \times \pi \times \frac{7}{12} + 6 \times 6 \div 4$
 $= 21 \times \pi + 9 = \underline{74.94(\text{cm}^2)}$




6

- (1) $50 \times \frac{3}{2+3} = 30(\text{cm}^3)$
 (2) $50 \times \frac{7}{3+7} \times \frac{1}{1+1} = 17.5(\text{cm}^3)$

7

- (1) 三角形ABG : 三角形BCG : 三角形CAG
 $\frac{4}{5} : \frac{4}{4} : \frac{5}{5}$
 $\frac{20}{16} : \frac{16}{16} : \frac{25}{16}$
- (2) AF : FB = 三角形CAG : 三角形BCG = $25 : 16$
- (3) AG : GD
 = (三角形ABG + 三角形CAG) : 三角形BCG
 = (20 + 25) : 16 = $45 : 16$

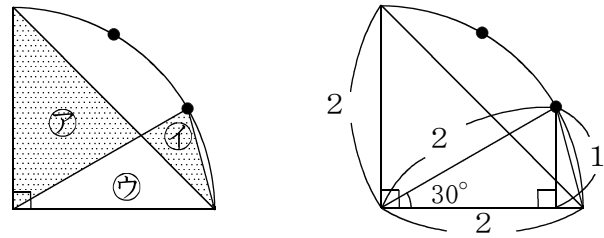
8

- (1) 対称軸がたて → エ
 対称軸が横 → オ
 対称軸がななめ → イ, ク
図形イ, エ, オ, ク
- (2)  の形 → 図形イ, ク

9

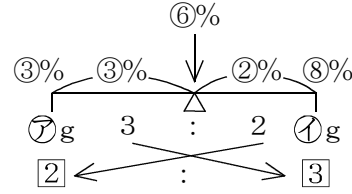
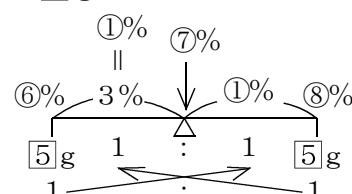
- (1) $100 = (\text{改} \times 1 - \square) \times 10$
 → $\text{改} \times 1 - \square = 100 \div 10 = 10(\text{人/分})$
 $100 = (\text{改} \times 2 - \square) \times 4$
 → $\text{改} \times 2 - \square = 100 \div 4 = 25(\text{人/分})$
 よって, $\text{改} = 25 - 10 = 15(\text{人/分}) \rightarrow \square = 5(\text{人/分})$
 $100 \div 5 = 20(\text{分前})$
- (2) 時計Aと時計Bの速さの比は
 $(60 + 8 \div 2) : (60 - 9 \div 3) = 64 : 57$
 $12 - 5 + 9 = 16(\text{時間}) \cdots \text{Aが進んだ時間}$
 $16 \times \frac{57}{64} = 14\frac{1}{4}(\text{時間}) \rightarrow 14\text{時間}15\text{分} \cdots \text{Bが進んだ時間}$
 $17\text{時}12\text{分} + 14\text{時間}15\text{分} = 31\text{時}27\text{分} \rightarrow \underline{7\text{時}27\text{分}}$
- (3) A, Bの販売量の比が3 : 5より, Aの販売量を360個,
 Bの販売量を600個とすると,
 Aの国外 ; $360 \times \frac{130}{360} = 130(\text{個})$
 Bの国外 ; $600 \times \frac{42}{360} = 70(\text{個})$
 よって, 2社の合計 ; $360 + 600 = 960(\text{個})$
 国外の合計 ; $130 + 70 = 200(\text{個})$
 これを円グラフで示す。
 960個 ; 360度
 200個 ; $360 \times \frac{200}{960} = 75(\text{度})$

(4)



㉞と㉟の差が $8\text{cm}^2 \rightarrow ㉞ + ㊱$ と $㉟ + ㊱$ の面積の差も 8cm^2
 $㉞ + ㊱$ と $㉟ + ㊱$ は底辺が共通で高さの比が $2 : 1$ なので
 面積の比は $2 : 1$
 よって, $㉞ - ㉟ = ㉟ = 8\text{cm}^2 \rightarrow ㉞ = 16\text{cm}^2$
 おうぎ形の半径を $\square\text{cm}$ とすると, 直角二等辺三角形の面積は
 $\square \times \square \div 2 = 16(\text{cm}^2) \rightarrow \square \times \square = 32$ より,
 $\frac{\square \times \square}{32} \times \pi \times \frac{1}{4} = 8 \times \pi = \underline{25.12(\text{cm}^2)}$

10

- (1) この比 = (食塩の重さの比) \div (食塩水全体の重さの比) より
 $\frac{3}{1} : \frac{32}{4} = \underline{3 : 8}$
- (2) $\left. \begin{array}{l} \text{A } 3\% \text{ } ㉞\text{g} \\ \text{B } 8\% \text{ } ㉟\text{g} \end{array} \right\} 6\% \rightarrow$ 
- よって, $㉞ : ㉟ = \underline{2 : 3}$
- (3) Bのはじめの重さは, $㉟ \times 4 = 8(\text{g})$
- $\left. \begin{array}{l} \text{A } 3\% \text{ } ㉞\text{g} \\ \text{B } 8\% \text{ } 8\text{g} \end{array} \right\} \text{操作1} \rightarrow$ 
- てんびんより, $㉞ - ㉟ = ㉟ = 3\%$
 はじめのAのこさ ; $㉞ = \underline{9(\%)}$

(配点) ①~⑥ 各2点×30
 ⑦, ⑧, ⑩ 各3点×8
 ⑨ 各4点×4