

1

|     |               |     |             |     |              |     |              |
|-----|---------------|-----|-------------|-----|--------------|-----|--------------|
| (1) | 200<br>(cm)   | (2) | 2<br>(kg)   | (3) | 30000<br>(L) | (4) | 0.16<br>(ha) |
| (5) | 191.9<br>(kg) | (6) | 1900<br>(a) |     |              |     |              |

2

|     |           |     |          |     |            |     |        |
|-----|-----------|-----|----------|-----|------------|-----|--------|
| (1) | 3000<br>円 | (2) | 250<br>円 | (3) | 30600<br>円 | (4) | 4<br>g |
| (5) | 8<br>%    | (6) | 200<br>g |     |            |     |        |

3

|     |          |     |           |     |         |     |    |
|-----|----------|-----|-----------|-----|---------|-----|----|
| (1) | 15<br>日  | (2) | 8<br>日    | (3) | 4<br>分後 | (4) | 73 |
| (5) | 5.7<br>点 | (6) | 10 月 17 日 |     |         |     |    |

4

|     |         |     |           |     |          |     |        |
|-----|---------|-----|-----------|-----|----------|-----|--------|
| (1) | 35<br>本 | (2) | 1260<br>度 | (3) | 360<br>度 | (4) | ○<br>① |
| (4) | ×       | (4) | ×         |     |          |     |        |
| ②   |         | ③   |           |     |          |     |        |

5

|   |         |   |          |   |          |   |         |
|---|---------|---|----------|---|----------|---|---------|
| ㊟ | 40<br>度 | ① | 105<br>度 | ㊟ | 150<br>度 | ⊕ | 60<br>度 |
|---|---------|---|----------|---|----------|---|---------|

6

|     |                           |     |                         |     |                           |     |                          |
|-----|---------------------------|-----|-------------------------|-----|---------------------------|-----|--------------------------|
| (1) | 48<br>cm <sup>2</sup>     | (2) | 5<br>cm <sup>2</sup>    | (3) | 100.48<br>cm <sup>2</sup> | (4) | 20.52<br>cm <sup>2</sup> |
| (5) | 146.24<br>cm <sup>2</sup> | (6) | 38.1<br>cm <sup>2</sup> |     |                           |     |                          |

7

|     |          |     |          |     |           |     |            |
|-----|----------|-----|----------|-----|-----------|-----|------------|
| (1) | 36<br>cm | (2) | 120<br>個 | (3) | 10.5<br>% | (4) | 100<br>(g) |
| (5) | 10<br>分前 |     |          |     |           |     |            |

8

|     |             |     |              |
|-----|-------------|-----|--------------|
| (1) | 午後 4 時 12 分 | (2) | 午前 11 時 12 分 |
|-----|-------------|-----|--------------|

9

11 月 16 日 曜日

10

|     |           |     |         |
|-----|-----------|-----|---------|
| (1) | 12<br>(日) | (2) | 40<br>度 |
|-----|-----------|-----|---------|

(配点) ①～⑤, ⑦ 各2点×33  
⑥, ⑧, ⑩ 各3点×10  
⑨ 4点

1

$$(5) \quad (6.3\text{kg} + 3400\text{g}) \times 27 - 0.07\text{t} \\ = (6.3\text{kg} + 3.4\text{kg}) \times 27 - 70\text{kg} \\ = \underline{191.9(\text{kg})}$$

$$(6) \quad (1.8\text{km}^2 - 48\text{ha} + 2400\text{a}) \div 10 + 34000\text{m}^2 \\ = (18000\text{a} - 4800\text{a} + 2400\text{a}) \div 10 + 340\text{a} \\ = \underline{1900(\text{a})}$$

2

$$(1) \quad 2000 \times 1.5 = \underline{3000(\text{円})}$$

$$(2) \quad 200 \div (1 - 0.2) = \underline{250(\text{円})}$$

$$(3) \quad 300 \times 600 = 180000(\text{円}) \cdots \text{総仕入れ額} \\ 300 \times (1 + 0.2) = 360(\text{円}) \cdots \text{定価} \\ 360 \times (1 - 0.1) = 324(\text{円}) \cdots 2\text{日目の売価} \\ 360 \times 450 + 324 \times (600 - 450) = 210600(\text{円}) \cdots \text{総売り上げ} \\ 210600 - 180000 = \underline{30600(\text{円})}$$

$$(4) \quad 100 \times 0.04 = \underline{4(\text{g})}$$

$$(5) \quad \frac{12}{200 \mid 0.06} + \frac{12}{100 \mid 0.12} = \frac{24}{300 \mid \square} \\ \square = 24 \div 300 = 0.08 \rightarrow \underline{8\%}$$

$$(6) \quad \begin{array}{c} 4\% \quad 4\% \quad 8\% \quad 8\% \quad 16\% \\ \square \text{g} \quad 1 \quad : \quad 2 \quad \circ \text{g} \\ \textcircled{2} \quad \quad \quad : \quad \quad \quad \textcircled{1} \\ \hline \text{和}\textcircled{3} = 300\text{g} \quad \textcircled{2} = \underline{200(\text{g})} \end{array}$$

3

$$(1) \quad \text{LCM}(24, 40) = 120 \cdots \text{仕事全体} \\ 120 \div 24 = 5 (\text{/日}) \cdots \text{A} \quad 120 \div 40 = 3 (\text{/日}) \cdots \text{B} \\ 120 \div (5 + 3) = \underline{15(\text{日})}$$

$$(2) \quad 10 \times 16 \div 20 = \underline{8(\text{日})}$$

$$(3) \quad 120 \div (70 - 40) = \underline{4(\text{分後})}$$

$$(4) \quad B - A = 27 \text{で一定。} \\ \textcircled{7} ; 4 + 27 = 31 \quad \textcircled{1} ; 15 + 27 = 42 \rightarrow 31 + 42 = \underline{73}$$

$$(5) \quad 1 + 2 + 5 + 8 + 5 + 2 = 23(\text{人}) \\ (2 \times 2 + 4 \times 5 + 6 \times 8 + 8 \times 5 + 10 \times 2) \div 23 = 5.73 \cdots \\ \text{よって, } \underline{5.7\text{点。}}$$

$$(6) \quad 9/27 + 20 = 9/47 = \underline{10/17}$$

4

$$(1) \quad (10 - 3) \times 10 \div 2 = \underline{35(\text{本})}$$

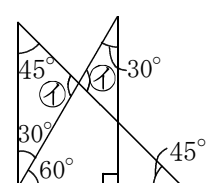
$$(2) \quad 180 \times (9 - 2) = \underline{1260(\text{度})}$$

(3) 何角形であっても、外角の和は360度。

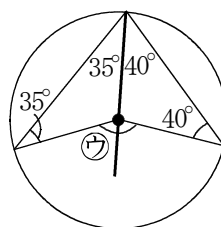
(4) ② 正五角形は線対称ではあるが、点対称ではない。

5

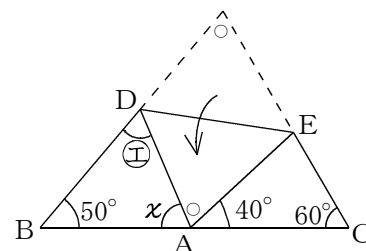
$$\textcircled{7} \quad 47 + 28 - 35 = \underline{40(\text{度})}$$

$$\textcircled{1} \quad 180 - (30 + 45) = \underline{105(\text{度})}$$


$$\textcircled{7} \quad 35 \times 2 + 40 \times 2 = \underline{150(\text{度})}$$



$$\textcircled{11} \quad \circ ; 180 - (50 + 60) = 70(\text{度}) \\ x = 180 - (70 + 40) = 70(\text{度}) \\ 180 - (50 + 70) = \underline{60(\text{度})}$$



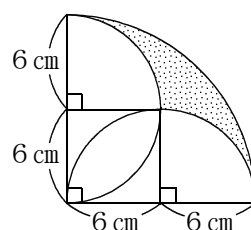
6

$$(1) \quad 6 \times 8 = \underline{48(\text{cm}^3)}$$

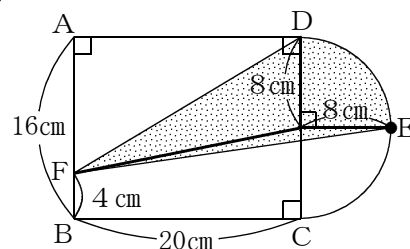
$$(2) \quad 5 \times 4 \div 4 = \underline{5(\text{cm}^2)}$$

$$(3) \quad 16 \times 16 \times \pi \times \frac{1}{8} = 32 \times \pi = \underline{100.48(\text{cm}^2)}$$

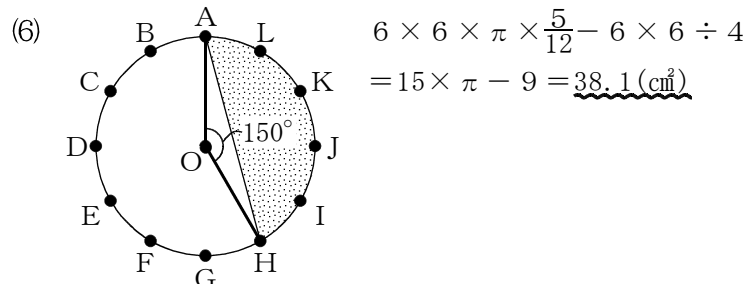
$$(4) \quad 12 \times 12 \times \pi \times \frac{1}{4} - 6 \times 6 \times \pi \times \frac{1}{4} \times 2 \\ - 6 \times 6 = 18 \times \pi - 36 = \underline{20.52(\text{cm}^2)}$$



(5)



$$8 \times 8 \times \pi \times \frac{1}{4} + 8 \times 20 \div 2 + 8 \times 4 \div 2 \\ = 16 \times \pi + 80 + 16 = \underline{146.24(\text{cm}^2)}$$



7

- (1) おもりが  $25 - 15 = 10(\text{g})$  増えると,  $30 - 26 = 4(\text{cm})$  のびる。  
 1 g について,  $4 \div 10 = 0.4(\text{cm})$  のびる。  
 $26 - 0.4 \times 15 = 20(\text{cm})$  …ばねの自然長  
 $20 + 0.4 \times 40 = \underline{36(\text{cm})}$

- (2)
- | 1 個            | 個数             | 合計       |
|----------------|----------------|----------|
| 原価 400円        | $\times 200$ 個 | = 80000円 |
| ↓ $\times 1.2$ |                |          |
| 定価 480円        |                |          |
| ↓ $\times 0.9$ |                |          |
| 残り 432円        |                |          |
- 200個で,  $80000 + 12160 = 92160(\text{円})$  のつるかめ算  
 $(92160 - 432 \times 200) \div (480 - 432) = \underline{120(\text{個})}$

- (3)
- |   |                                  |               |                                  |                                 |                                  |
|---|----------------------------------|---------------|----------------------------------|---------------------------------|----------------------------------|
| A | $\frac{24\text{g}}{200\text{g}}$ | $\rightarrow$ | $\frac{12\text{g}}{100\text{g}}$ | $\rightarrow$                   | $\frac{21\text{g}}{200\text{g}}$ |
|   |                                  |               | $\searrow$                       | $\nearrow$                      |                                  |
|   |                                  |               | $\frac{12\text{g}}{100\text{g}}$ | $\frac{9\text{g}}{100\text{g}}$ |                                  |
| B | $\frac{6\text{g}}{100\text{g}}$  | $\rightarrow$ | $\frac{18\text{g}}{200\text{g}}$ | $\rightarrow$                   | $\frac{9\text{g}}{100\text{g}}$  |
- $\frac{21}{200} \times 100 = \underline{10.5(\%)}$

- (4)
- |                            |     |                                    |     |                                    |     |                                        |
|----------------------------|-----|------------------------------------|-----|------------------------------------|-----|----------------------------------------|
| $\frac{36}{400 \mid 0.09}$ | $-$ | $\frac{0}{\textcircled{1} \mid 0}$ | $+$ | $\frac{0}{\textcircled{6} \mid 0}$ | $=$ | $\frac{36}{\textcircled{7} \mid 0.04}$ |
|----------------------------|-----|------------------------------------|-----|------------------------------------|-----|----------------------------------------|
- $36 \div 0.04 = 900(\text{g}) \dots \textcircled{7}$   
 $900 - 400 = 500(\text{g}) = \textcircled{6} - \textcircled{1} = \textcircled{5}(\text{g})$   
 $\textcircled{1} = \underline{100(\text{g})}$

- (5)  $160 = (\text{改} \times 1 - \square) \times 20 \rightarrow \text{改} \times 1 - \square = 160 \div 20 = 8(\text{人})$   
 $160 = (\text{改} \times 2 - \square) \times 5 \rightarrow \text{改} \times 2 - \square = 160 \div 5 = 32(\text{人})$   
 よって,  $\text{改} = 32 - 8 = 24(\text{人}) \rightarrow \square = 16(\text{人})$   
 $160 \div 16 = \underline{10(\text{分前})}$

8

- (1)  $15 \div 12 = 1.25(\text{分}) \dots 1$  時間の遅れ  
 $24\text{時間} + 4\text{時間}48\text{分} = 28\text{時間}48\text{分}$   
 $1.25 \times 28.8 = 36(\text{分})$  の遅れ  
 $\text{午後} 4\text{時}48\text{分} - 36\text{分} = \underline{\text{午後} 4\text{時}12\text{分}}$
- (2) 正しい時計: おくれる時計 = 12時間 : 11時間45分 = 48 : 47  
 $24\text{時間} + 22\text{時間}13\text{分} = 46\text{時間}13\text{分} = 2773\text{分}$   
 $2773 \times \frac{48 - 47}{47} = 59(\text{分})$   
 $\text{午前}10\text{時}13\text{分} + 59\text{分} = \underline{\text{午前}11\text{時}12\text{分}}$

9

全44人, 6人ずつ。

$\textcircled{1} \quad \textcircled{2} \quad \dots \quad \textcircled{22} \quad \textcircled{23}$   
 $(1 \sim 6) (7 \sim 12) \dots (39 \sim 44) \mid (1 \sim 6)$

$\text{LCM}(44, 6) = 132(\text{人})$

$132 \div 6 = 22(\text{グループ})$  のくり返し。

3回目の当番は,  $22 \times 2 + 1 = 45(\text{グループ目})$

カレンダーをかいいて調べる。

| 金    | 土  | 日  | 月      | 火     | 水     | 木     |
|------|----|----|--------|-------|-------|-------|
| 9/25 | 26 | 27 | 28     | 29    | 30    | ①     |
| 10/2 | ③  | 4  | 5      | ..... | ..... | ..... |
| ⋮    | ⋮  | ⋮  | ⋮      | ⋮     | ⋮     | ⋮     |
| ○    | ○  |    | ○      | ○     | ○     | ○     |
| ○    | ○  |    | ● ← ココ |       |       |       |

7 週

当番のある日に○をつけると, 1週間で○が6個つく。

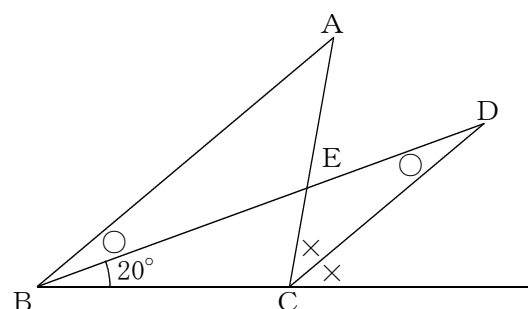
$45 \div 6 = 7(\text{週})$  あまり 3(個)  $\rightarrow$  月

$9/28 + 7 \times 7 = 9/77 = 10/47 = \underline{11/16}$

10

- (1) 仕事 $\textcircled{7}$ :  $A \times 8 = B \times \square \rightarrow A : B = \square : 8$   
 仕事 $\textcircled{4}$ :  $A \times \square = B \times 18 \rightarrow A : B = 18 : \square$   
 よって,  $\square : 8 = 18 : \square$   
 $\square \times \square = 8 \times 18 = 144$   
 $\square = \underline{12(\text{日})}$

(2)



さっ角が等しいので, ABとDCは平行。

三角形BCDの外角より,  $x = \textcircled{O} + 20$

角BAC = 角ACD =  $x = \textcircled{O} + 20$

よって, 角ABC = 角BACより,  $AC = BC$

これと  $AC = DC$  より,  $AC = BC = DC$

よって, 三角形DBCは  $BC = DC$  の二等辺三角形。

よって,  $\textcircled{O} = 20(\text{度}) \rightarrow x = 20 + 20 = \underline{40(\text{度})}$

(配点)  $\textcircled{1} \sim \textcircled{5}, \textcircled{7}$  各2点  $\times 33$   
 $\textcircled{6}, \textcircled{8}, \textcircled{10}$  各3点  $\times 10$   
 $\textcircled{9}$  4点