

小学 **6** 年生

単位と図形に

ぐんぐんと  
強くなる



# 別冊 解答

- 答え合わせは、1つずついねいに見ていきましょう。
- まちがえた問題は、どこでまちがえたのかを確かめて、できるようにしましょう。

## 1

分数と時間①  
分⇒時間①

P4・5

- 1
- ①  $\frac{1}{60}$                       ②  $\frac{19}{60}$   
 ③  $\frac{31}{60}$                       ④  $\frac{23}{60}$   
 ⑤  $\frac{47}{60}$                       ⑥  $\frac{11}{60}$   
 ⑦  $\frac{59}{60}$                       ⑧  $\frac{37}{60}$   
 ⑨  $\frac{13}{60}$                       ⑩  $\frac{49}{60}$   
 ⑪  $\frac{7}{60}$                       ⑫  $\frac{53}{60}$
- 2
- ①  $\frac{1}{6}$                       ②  $\frac{1}{4}$   
 ③  $\frac{1}{10}$                       ④  $\frac{7}{30}$   
 ⑤  $\frac{5}{6}$                       ⑥  $\frac{3}{4}$   
 ⑦  $\frac{1}{30}$                       ⑧  $\frac{3}{5}$   
 ⑨  $\frac{1}{12}$                       ⑩  $\frac{3}{20}$   
 ⑪  $\frac{23}{30}$                       ⑫  $\frac{11}{20}$   
 ⑬  $\frac{2}{5}$                       ⑭  $\frac{2}{15}$   
 ⑮  $\frac{7}{12}$                       ⑯  $\frac{1}{5}$

## !ポイント

1 1時間=60分だから、△分を時間の単位で表すと、 $\triangle \div 60 = \frac{\triangle}{60}$ になります。

## 2

分数と時間②  
分⇒時間②

P6・7

- 1
- ①  $1\frac{7}{60}$                       ②  $2\frac{43}{60}$   
 ③  $3\frac{11}{60}$                       ④  $1\frac{29}{60}$   
 ⑤  $2\frac{53}{60}$                       ⑥  $3\frac{31}{60}$   
 ⑦  $1\frac{49}{60}$                       ⑧  $3\frac{1}{60}$

⑨  $2\frac{13}{60}$

⑩  $3\frac{37}{60}$

⑪  $2\frac{41}{60}$

⑫  $1\frac{59}{60}$

2 ①  $1\frac{1}{3}$

②  $2\frac{1}{12}$

③  $1\frac{1}{20}$

④  $3\frac{4}{5}$

⑤  $3\frac{1}{6}$

⑥  $1\frac{5}{12}$

⑦  $2\frac{9}{20}$

⑧  $3\frac{11}{12}$

⑨  $2\frac{2}{3}$

⑩  $1\frac{17}{30}$

⑪  $3\frac{5}{6}$

⑫  $2\frac{1}{15}$

⑬  $1\frac{13}{20}$

⑭  $3\frac{9}{10}$

⑮  $2\frac{4}{15}$

⑯  $1\frac{1}{4}$

## 3

分数と時間③  
時間⇒分①

P8・9

- 1
- ① 60                      ② 1  
 ③ 17                      ④ 23  
 ⑤ 31                      ⑥ 49  
 ⑦ 53                      ⑧ 29  
 ⑨ 47                      ⑩ 11
- 2
- ① 2                      ② 4  
 ③ 6                      ④ 12  
 ⑤ 30                      ⑥ 50  
 ⑦ 27                      ⑧ 24  
 ⑨ 35                      ⑩ 46

## 4

分数と時間④  
時間⇒分②

P10・11

- 1
- ① 79                      ② 103  
 ③ 151                      ④ 173  
 ⑤ 77                      ⑥ 161  
 ⑦ 143                      ⑧ 109  
 ⑨ 157                      ⑩ 119
- 2
- ① 69                      ② 76  
 ③ 162                      ④ 84  
 ⑤ 165                      ⑥ 150  
 ⑦ 110                      ⑧ 100  
 ⑨ 125                      ⑩ 164

⑪ 141

⑫ 62

⑬ 114

⑭ 175

**5**分数と時間⑤  
秒⇒分①

P12・13

**1**

①  $\frac{1}{60}$

②  $\frac{29}{60}$

③  $\frac{41}{60}$

④  $\frac{13}{60}$

⑤  $\frac{59}{60}$

⑥  $\frac{23}{60}$

⑦  $\frac{31}{60}$

⑧  $\frac{7}{60}$

⑨  $\frac{43}{60}$

⑩  $\frac{11}{60}$

⑪  $\frac{37}{60}$

⑫  $\frac{53}{60}$

**2**

①  $\frac{1}{3}$

②  $\frac{3}{4}$

③  $\frac{1}{15}$

④  $\frac{19}{30}$

⑤  $\frac{1}{6}$

⑥  $\frac{1}{30}$

⑦  $\frac{11}{20}$

⑧  $\frac{5}{12}$

⑨  $\frac{4}{5}$

⑩  $\frac{3}{10}$

⑪  $\frac{11}{12}$

⑫  $\frac{7}{20}$

⑬  $\frac{2}{3}$

⑭  $\frac{1}{10}$

⑮  $\frac{29}{30}$

⑯  $\frac{9}{20}$

**6**分数と時間⑥  
秒⇒分②

P14・15

**1**

①  $1\frac{17}{60}$

②  $2\frac{41}{60}$

③  $3\frac{37}{60}$

④  $2\frac{13}{60}$

⑤  $1\frac{23}{60}$

⑥  $3\frac{47}{60}$

⑦  $2\frac{11}{60}$

⑧  $3\frac{19}{60}$

⑨  $1\frac{59}{60}$

⑩  $2\frac{43}{60}$

⑪  $3\frac{7}{60}$

⑫  $1\frac{29}{60}$

**2**

①  $1\frac{2}{3}$

②  $2\frac{1}{4}$

③  $1\frac{1}{30}$

④  $3\frac{14}{15}$

⑤  $2\frac{1}{3}$

⑥  $1\frac{1}{12}$

⑦  $3\frac{2}{15}$

⑧  $2\frac{13}{20}$

⑨  $1\frac{7}{30}$

⑩  $3\frac{3}{4}$

⑪  $2\frac{17}{20}$

⑫  $1\frac{3}{20}$

⑬  $1\frac{11}{30}$

⑭  $2\frac{1}{10}$

⑮  $3\frac{7}{12}$

⑯  $1\frac{7}{20}$

**7**分数と時間⑦  
分⇒秒①

P16・17

**1**

① 60

② 1

③ 29

④ 47

⑤ 31

⑥ 59

⑦ 13

⑧ 7

⑨ 41

⑩ 53

**2**

① 6

② 20

③ 5

④ 15

⑤ 2

⑥ 8

⑦ 9

⑧ 48

⑨ 42

⑩ 55

**8**分数と時間⑧  
分⇒秒②

P18・19

**1**

① 67

② 109

③ 173

④ 131

⑤ 89

⑥ 157

⑦ 103

⑧ 139

⑨ 77

⑩ 151

**2**

① 74

② 87

③ 128

④ 138

⑤ 108

⑥ 135

⑦ 85

⑧ 162

⑨ 130

⑩ 100

⑪ 82

⑫ 141

⑬ 136

⑭ 72



- ⑤  $11 \times 11 \times 3.14 \div 4 = 94.985$   
 答え  $94.985 \text{ cm}^2$
- ⑥  $18 \times 18 \times 3.14 \div 4 = 254.34$   
 答え  $254.34 \text{ cm}^2$

## 12

### 円③ 円の面積③

P26・27

- 1 ①  $5 \times 5 \times 3.14 = 78.5$   
 $4 \times 4 \times 3.14 = 50.24$   
 $78.5 - 50.24 = 28.26$   
 答え  $28.26 \text{ cm}^2$
- ②  $14 \div 2 = 7$   
 $7 \times 7 \times 3.14 = 153.86$   
 $7 \div 2 = 3.5$   
 $3.5 \times 3.5 \times 3.14 = 38.465$   
 $153.86 - 38.465 = 115.395$   
 答え  $115.395 \text{ cm}^2$
- ③  $8 \div 2 = 4$   
 $4 \times 4 \times 3.14 = 50.24$   
 $4 \div 2 = 2$   
 $2 \times 2 \times 3.14 = 12.56$   
 $50.24 - 12.56 = 37.68$   
 答え  $37.68 \text{ cm}^2$
- ④  $6 \div 2 = 3$   
 $3 \times 3 \times 3.14 = 28.26$   
 $5 \div 2 = 2.5$   
 $2.5 \times 2.5 \times 3.14 = 19.625$   
 $1 \div 2 = 0.5$   
 $0.5 \times 0.5 \times 3.14 = 0.785$   
 $28.26 - 19.625 - 0.785 = 7.85$   
 答え  $7.85 \text{ cm}^2$
- 2 ①  $10 \div 2 = 5$   
 $5 \times 5 \times 3.14 = 78.5$   
 $10 \times 10 \div 2 = 50$   
 $78.5 - 50 = 28.5$   
 答え  $28.5 \text{ cm}^2$
- ②  $18 \div 2 = 9$   
 $9 \times 9 \times 3.14 = 254.34$   
 $18 \times 18 \div 2 = 162$   
 $254.34 - 162 = 92.34$   
 答え  $92.34 \text{ cm}^2$
- ③  $9 \times 9 \times 3.14 \div 2 = 127.17$   
 $9 \times 2 = 18$   
 $18 \times 9 \div 2 = 81$   
 $127.17 - 81 = 46.17$   
 答え  $46.17 \text{ cm}^2$

- ④  $7 \times 7 \times 3.14 \div 2 = 76.93$   
 $7 \times 2 = 14$   
 $14 \times 7 \div 2 = 49$   
 $76.93 - 49 = 27.93$   
 答え  $27.93 \text{ cm}^2$

### ポイント

2 ①② ひし形の面積 = 一方の対角線 × もう一方の対角線 ÷ 2 で求めます。また、円の直径の長さ、対角線の長さは同じです。

③④ 円の半径の長さ、三角形の高さは同じです。

## 13

### 円④ 円の面積④

P28・29

- 1 ①  $4 \times 4 \times 3.14 \div 2 = 25.12$   
 $(4 \times 2) \times 5.5 \div 2 = 22$   
 $25.12 + 22 = 47.12$   
 答え  $47.12 \text{ cm}^2$
- ②  $8 \div 2 = 4$   
 $(4 \times 4 \times 3.14 \div 2) \times 2 = 50.24$   
 $8 \times 10 = 80$   
 $50.24 + 80 = 130.24$   
 答え  $130.24 \text{ cm}^2$
- ③  $6 \div 2 = 3$   
 $(3 \times 3 \times 3.14 \div 2) \times 4 = 56.52$   
 $6 \times 6 = 36$   
 $56.52 + 36 = 92.52$   
 答え  $92.52 \text{ cm}^2$
- 2 ①  $16 \div 2 = 8$   
 $(8 \times 8 \times 3.14 \div 4) \times 3 = 150.72$   
 答え  $150.72 \text{ cm}^2$
- ②  $(2 \times 2 \times 3.14 \div 4) \times 3 = 9.42$   
 $2 \times 2 = 4$   
 $9.42 + 4 = 13.42$   
 答え  $13.42 \text{ cm}^2$
- ③  $6 \times 6 \times 3.14 \div 4 = 28.26$   
 $7 \times 7 \times 3.14 \div 4 = 38.465$   
 $7 \times 6 \div 2 = 21$   
 $28.26 + 38.465 + 21 = 87.725$   
 答え  $87.725 \text{ cm}^2$
- ④  $14 \times 14 \times 3.14 \div 4 = 153.86$   
 $10 \times 10 \times 3.14 \div 4 = 78.5$   
 $10 \times (14 + 10) = 240$   
 $153.86 + 78.5 + 240 = 472.36$   
 答え  $472.36 \text{ cm}^2$

$$\begin{aligned} ① \quad & 7 \times 7 = 49 \\ & 7 \div 2 = 3.5 \\ & 3.5 \times 3.5 \times 3.14 = 38.465 \\ & 49 - 38.465 = 10.535 \\ & \text{答え } 10.535 \text{ cm}^2 \end{aligned}$$

$$\begin{aligned} ② \quad & 4 \times 6.4 = 25.6 \\ & 4 \div 2 = 2 \\ & 2 \times 2 \times 3.14 = 12.56 \\ & 25.6 - 12.56 = 13.04 \\ & \text{答え } 13.04 \text{ cm}^2 \end{aligned}$$

$$\begin{aligned} ③ \quad & 16 \times (16 \div 2) = 128 \\ & 16 \div 2 = 8 \\ & 8 \times 8 \times 3.14 \div 2 = 100.48 \\ & 128 - 100.48 = 27.52 \\ & \text{答え } 27.52 \text{ cm}^2 \end{aligned}$$

$$\begin{aligned} ④ \quad & 12 \times 12 = 144 \\ & 12 \times 12 \times 3.14 \div 4 = 113.04 \\ & 144 - 113.04 = 30.96 \\ & \text{答え } 30.96 \text{ cm}^2 \end{aligned}$$

$$\begin{aligned} 2 \quad ① \quad & 3 \times 2 = 6 \\ & 2 \div 2 = 1 \\ & 1 \times 1 \times 3.14 = 3.14 \\ & 3 - 2 = 1 \\ & 1 \div 2 = 0.5 \\ & 0.5 \times 0.5 \times 3.14 = 0.785 \\ & 6 - 3.14 - 0.785 = 2.075 \\ & \text{答え } 2.075 \text{ cm}^2 \end{aligned}$$

} 大きい円の面積

} 小さい円の面積

$$\begin{aligned} ② \quad & 2 \times 4 = 8 \\ & 2 \div 2 = 1 \\ & (1 \times 1 \times 3.14 \div 2) \times 2 = 3.14 \\ & 8 - 3.14 = 4.86 \\ & \text{答え } 4.86 \text{ cm}^2 \end{aligned}$$

$$\begin{aligned} ③ \quad & 10 \times 10 = 100 \\ & 10 \div 2 = 5 \\ & (5 \times 5 \times 3.14 \div 4) \times 4 = 78.5 \\ & 100 - 78.5 = 21.5 \\ & \text{答え } 21.5 \text{ cm}^2 \end{aligned}$$

$$\begin{aligned} ④ \quad & 15 \times 15 = 225 \\ & (10 \times 10 \times 3.14 \div 4) \times 2 = 157 \\ & 225 - 157 = 68 \\ & \text{答え } 68 \text{ cm}^2 \end{aligned}$$

$$\begin{aligned} ⑤ \quad & 4 \times 12 = 48 \\ & 4 \times 4 \times 3.14 \div 4 = 12.56 \end{aligned}$$

$$\begin{aligned} & (12 - 4) \div 2 = 4 \\ & 4 \times 4 \times 3.14 \div 2 = 25.12 \\ & 48 - 12.56 - 25.12 \\ & = 10.32 \\ & \text{答え } 10.32 \text{ cm}^2 \end{aligned}$$

$$\begin{aligned} ⑥ \quad & 20 \times 20 = 400 \\ & 10 \div 2 = 5 \\ & (5 \times 5 \times 3.14) \times 4 = 314 \\ & 400 - 314 = 86 \\ & \text{答え } 86 \text{ cm}^2 \end{aligned}$$

$$\begin{aligned} 1 \quad ① \quad & 5 \times 5 \times 3.14 \div 4 - 5 \times 5 \div 2 = 7.125 \\ & \text{答え } 7.125 \text{ cm}^2 \\ ② \quad & 10 \times 10 \times 3.14 \div 4 - 10 \times 10 \div 2 \\ & = 28.5 \\ & 28.5 \times 2 = 57 \\ & \text{答え } 57 \text{ cm}^2 \end{aligned}$$

$$\begin{aligned} 2 \quad ① \quad & 8 \times 8 = 64 \\ & 8 \times 8 \times 3.14 \div 4 = 50.24 \\ & 64 - 50.24 = 13.76 \\ & 13.76 \times 2 = 27.52 \\ & \text{答え } 27.52 \text{ cm}^2 \\ ② \quad & 12 \times 12 = 144 \\ & 12 \times 12 \times 3.14 \div 4 = 113.04 \\ & 144 - 113.04 = 30.96 \\ & 30.96 \times 2 = 61.92 \\ & \text{答え } 61.92 \text{ cm}^2 \end{aligned}$$

$$\begin{aligned} ③ \quad & 6 \div 2 = 3 \\ & 3 \times 3 = 9 \\ & 3 \times 3 \times 3.14 \div 4 = 7.065 \\ & (9 - 7.065) \times 2 = 3.87 \\ & 9 + 3.87 = 12.87 \\ & \text{答え } 12.87 \text{ cm}^2 \end{aligned}$$

$$\begin{aligned} ④ \quad & 4 \div 2 = 2 \\ & 2 \times 2 = 4 \\ & 2 \times 2 \times 3.14 \div 4 = 3.14 \\ & (4 - 3.14) \times 2 = 1.72 \\ & 4 + 1.72 = 5.72 \\ & \text{答え } 5.72 \text{ cm}^2 \end{aligned}$$

答え  $14.94\text{cm}^2$

$$\begin{aligned} \textcircled{3} \quad & 3 \times 2 = 6 \\ & 6 \times 10 = 60 \\ & 3 \times 3 \times 3.14 = 28.26 \\ & 60 - 28.26 = 31.74 \end{aligned}$$

答え  $31.74\text{cm}^2$

$$\begin{aligned} \textcircled{4} \quad & 9 \times 9 \times 3.14 = 254.34 \\ & 9 \div 2 = 4.5 \\ & 4.5 \times 4.5 \times 3.14 = 63.585 \\ & 254.34 - 63.585 = 190.755 \end{aligned}$$

答え  $190.755\text{cm}^2$

$$\begin{aligned} \textcircled{5} \quad & 8 \times 8 \times 3.14 \div 2 = 100.48 \\ & 4 \div 2 = 2 \\ & (2 \times 2 \times 3.14) \times 2 = 25.12 \\ & 100.48 - 25.12 = 75.36 \end{aligned}$$

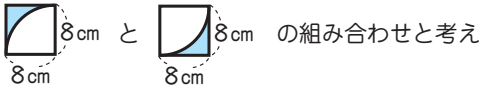
答え  $75.36\text{cm}^2$



$$\begin{aligned} \textcircled{6} \quad & 4 \times 4 = 16 \\ & (2 \times 2 \times 3.14) \div 2 = 6.28 \\ & 16 - 6.28 = 9.72 \end{aligned}$$

答え  $9.72\text{cm}^2$

ポイント

2①



ます。1辺が8cmの正方形の面積から半径が8cmの  の面積をひくと  の部分の面積が求められます。

16

円⑦  
円の面積⑦

P34-35

$$\begin{aligned} \textcircled{1} \quad & \textcircled{1} \quad 10 \times 10 \times 3.14 \div 2 = 157 \\ & 10 \div 2 = 5 \\ & 5 \times 5 \times 3.14 = 78.5 \\ & 157 + 78.5 = 235.5 \end{aligned}$$

答え  $235.5\text{cm}^2$

$$\begin{aligned} \textcircled{2} \quad & 2 \div 2 = 1 \\ & 1 \times 1 \times 3.14 = 3.14 \end{aligned}$$

答え  $3.14\text{cm}^2$

$$\begin{aligned} \textcircled{3} \quad & 8 \div 2 = 4 \\ & 4 \times 4 \times 3.14 = 50.24 \end{aligned}$$


答え  $50.24\text{cm}^2$

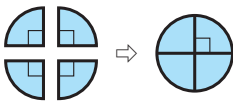
$$\begin{aligned} \textcircled{4} \quad & 4 \times 4 \times 3.14 = 50.24 \\ & 4 \div 2 = 2 \\ & (2 \times 2 \times 3.14) \times 2 = 25.12 \\ & 50.24 + 25.12 = 75.36 \end{aligned}$$

答え  $75.36\text{cm}^2$

ポイント

1③

同じ大きさの  が4つで1つの円と同じ面積になります。



$$\begin{aligned} \textcircled{2} \quad & \textcircled{1} \quad 12 \times 12 \times 3.14 \div 2 = 226.08 \\ & 12 \div 2 = 6 \\ & 6 \times 6 \times 3.14 = 113.04 \\ & 226.08 - 113.04 = 113.04 \end{aligned}$$

答え  $113.04\text{cm}^2$

$$\begin{aligned} \textcircled{2} \quad & 7.2 \times 6 = 43.2 \\ & 6 \div 2 = 3 \\ & 3 \times 3 \times 3.14 = 28.26 \\ & 43.2 - 28.26 = 14.94 \end{aligned}$$

17

円⑧  
円の面積⑧

P36-37

$$\begin{aligned} \textcircled{1} \quad & \textcircled{1} \quad 6 \times 6 \times 3.14 \div 2 = 56.52 \\ & \text{答え} \quad 56.52\text{cm}^2 \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad & 7 \times 7 \times 3.14 \div 2 = 76.93 \\ & \text{答え} \quad 76.93\text{cm}^2 \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad & 9 \times 3 = 27 \\ & \text{答え} \quad 27\text{cm}^2 \end{aligned}$$

$$\begin{aligned} \textcircled{4} \quad & 6 \times 8 = 48 \\ & \text{答え} \quad 48\text{cm}^2 \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad & \textcircled{1} \quad 2 \times 2 \times 3.14 \div 2 = 6.28 \\ & \text{答え} \quad 6.28\text{cm}^2 \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad & 6 \times 8 = 48 \\ & \text{答え} \quad 48\text{cm}^2 \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad & 6 \times 6 \times 3.14 \div 2 = 56.52 \\ & \text{答え} \quad 56.52\text{cm}^2 \end{aligned}$$

$$\begin{aligned} \textcircled{4} \quad & 2.2 \times 2 = 4.4 \\ & \text{答え} \quad 4.4\text{cm}^2 \end{aligned}$$

$$\begin{aligned} \textcircled{5} \quad & 4 \times 4 \times 3.14 \div 2 = 25.12 \\ & \text{答え} \quad 25.12\text{cm}^2 \end{aligned}$$

$$\begin{aligned} \textcircled{6} \quad & 9 \times 9 = 81 \\ & \text{答え} \quad 81\text{cm}^2 \end{aligned}$$

- 1 ①  $6 \times 6 \times 3.14 = 113.04$   
答え  $113.04 \text{ cm}^2$
- ②  $10 \div 2 = 5$   
 $5 \times 5 \times 3.14 = 78.5$   
答え  $78.5 \text{ cm}^2$
- ③  $8 \times 8 \times 3.14 \div 2 = 100.48$   
答え  $100.48 \text{ cm}^2$
- ④  $14 \div 2 = 7$   
 $7 \times 7 \times 3.14 \div 2 = 76.93$   
答え  $76.93 \text{ cm}^2$
- ⑤  $18 \div 2 = 9$   
 $9 \times 9 \times 3.14 \div 2 = 127.17$   
答え  $127.17 \text{ cm}^2$
- ⑥  $5 \times 5 \times 3.14 \div 4 = 19.625$   
答え  $19.625 \text{ cm}^2$
- ⑦  $12 \times 12 \times 3.14 \div 4 = 113.04$   
答え  $113.04 \text{ cm}^2$
- ⑧  $6 \times 6 \times 3.14 \div 4 = 28.26$   
答え  $28.26 \text{ cm}^2$
- 2 ①  $6 \times 6 \times 3.14 = 113.04$  …大きい  
 $6 \div 2 = 3$  円の面積  
 $3 \times 3 \times 3.14 = 28.26$  …小さい  
円の面積  
 $113.04 - 28.26 = 84.78$   
答え  $84.78 \text{ cm}^2$
- ②  $4 \times 4 \times 3.14 \div 2 = 25.12$   
 $(4 \times 2) \times 4 \div 2 = 16$   
 $25.12 - 16 = 9.12$   
答え  $9.12 \text{ cm}^2$
- ③  $16 \times 16 = 256$   
 $16 \times 16 \times 3.14 \div 4 = 200.96$   
 $256 - 200.96 = 55.04$   
答え  $55.04 \text{ cm}^2$
- ④  $10 \times 10 \times 3.14 \div 4 = 78.5$   
 $10 \times 10 \div 2 = 50$   
 $78.5 - 50 = 28.5$   
答え  $28.5 \text{ cm}^2$
- 3  $14 \times 14 \times 3.14 = 615.44$   
 $14 \div 2 = 7$   
 $7 \times 7 \times 3.14 = 153.86$   
 $615.44 - 153.86 = 461.58$   
答え  $461.58 \text{ cm}^2$

- 1 ア, ①, ③, ④
- 2 ①  $3 \times 4 = 12$   
答え  $12 \text{ cm}^2$
- ②  $3 \times 3 = 9$   
答え  $9 \text{ cm}^2$
- ③  $4 \times 3 \div 2 = 6$   
答え  $6 \text{ cm}^2$
- ④  $2 \times 5 \div 2 = 5$   
答え  $5 \text{ cm}^2$
- ⑤  $5 \times 3 \div 2 = 7.5$   
答え  $7.5 \text{ cm}^2$
- ⑥  $2 \times 2 \times 3.14 = 12.56$   
答え  $12.56 \text{ cm}^2$
- ⑦  $(3+5) \times 4 \div 2 = 16$   
答え  $16 \text{ cm}^2$
- ⑧  $3 \times 2 \div 2 = 3$   
答え  $3 \text{ cm}^2$
- ⑨  $3 \times 3 \times 3.14 = 28.26$   
答え  $28.26 \text{ cm}^2$

- 1 ①  $7 \times 5 = 35$   
答え  $35 \text{ cm}^3$
- ②  $8 \times 3 = 24$   
答え  $24 \text{ cm}^3$
- ③  $9 \times 3 = 27$   
答え  $27 \text{ cm}^3$
- ④  $10 \times 4 = 40$   
答え  $40 \text{ cm}^3$
- 2 ①  $2 \times 5 = 10$   
答え  $10 \text{ cm}^3$
- ②  $16 \times 4 = 64$   
答え  $64 \text{ cm}^3$
- ③  $12 \times 1 = 12$   
答え  $12 \text{ cm}^3$
- ④  $6 \times 3 = 18$   
答え  $18 \text{ cm}^3$
- ⑤  $12 \times 5 = 60$   
答え  $60 \text{ cm}^3$
- ⑥  $5 \times 10 = 50$   
答え  $50 \text{ cm}^3$



⑦  $6 \times 7 = 42$

答え  $42\text{cm}^3$

⑧  $13 \times 6 = 78$

答え  $78\text{cm}^3$

## 21

### 体積③ 角柱の体積②

P44・45

1 ①  $2 \times 2 \times 6 = 24$

答え  $24\text{cm}^3$

②  $3 \times 4 \times 5 = 60$

答え  $60\text{cm}^3$

③  $1 \times 1 \times 8 = 8$

答え  $8\text{cm}^3$

④  $10 \times 10 \times 2 = 200$

答え  $200\text{cm}^3$

2 ①  $2 \times 3 \div 2 \times 2 = 6$

答え  $6\text{cm}^3$

②  $6 \times 6 \div 2 \times 6 = 108$

答え  $108\text{cm}^3$

③  $3 \times 2 \div 2 \times 5 = 15$

答え  $15\text{cm}^3$

④  $6 \times 3 \div 2 \times 2 = 18$

答え  $18\text{cm}^3$

⑤  $8 \times 8 \div 2 \times 20 = 640$

答え  $640\text{cm}^3$

⑥  $(3+7) \times 5 \div 2 \times 1 = 25$

答え  $25\text{cm}^3$

⑦  $(4+6) \times 2 \div 2 \times 3 = 30$

答え  $30\text{cm}^3$

⑧  $(9+7) \times 5 \div 2 \times 10 = 400$

答え  $400\text{cm}^3$

## 22

### 体積④ 円柱の体積①

P46・47

1 ①  $3 \times 2 = 6$

答え  $6\text{cm}^3$

②  $110 \times 4 = 440$

答え  $440\text{cm}^3$

③  $13 \times 10 = 130$

答え  $130\text{cm}^3$

④  $4 \times 20 = 80$

答え  $80\text{cm}^3$

2 ①  $4 \times 4 \times 3.14 \times 9 = 452.16$

答え  $452.16\text{cm}^3$

②  $20 \times 20 \times 3.14 \times 10 = 12560$

答え  $12560\text{cm}^3$

③  $1 \times 1 \times 3.14 \times 5 = 15.7$

答え  $15.7\text{cm}^3$

④  $3 \times 3 \times 3.14 \times 6 = 169.56$

答え  $169.56\text{cm}^3$

### 3

①  $8 \div 2 = 4$

$4 \times 4 \times 3.14 \times 7 = 351.68$

答え  $351.68\text{cm}^3$

②  $14 \div 2 = 7$

$7 \times 7 \times 3.14 \times 20 = 3077.2$

答え  $3077.2\text{cm}^3$

③  $4 \div 2 = 2$

$2 \times 2 \times 3.14 \times 6 = 75.36$

答え  $75.36\text{cm}^3$

## 23

### 体積⑤ 円柱の体積②

P48・49

### 1

①  $3 \times 3 \times 3.14 \times 6 \div 2 = 84.78$

答え  $84.78\text{cm}^3$

②  $7 \times 7 \times 3.14 \times 15 \div 2 = 1153.95$

答え  $1153.95\text{cm}^3$

③  $10 \times 10 \times 3.14 \times 16 \div 2 = 2512$

答え  $2512\text{cm}^3$

### 2

①  $8 \div 2 = 4$

$4 \times 4 \times 3.14 \times 22 \div 2 = 552.64$

答え  $552.64\text{cm}^3$

②  $14 \div 2 = 7$

$7 \times 7 \times 3.14 \times 20 \div 2 = 1538.6$

答え  $1538.6\text{cm}^3$

### 3

①  $4 \times 4 \times 3.14 \times 6 \div 4 = 75.36$

答え  $75.36\text{cm}^3$

②  $30 \times 30 \times 3.14 \times 20 \div 4 = 14130$

答え  $14130\text{cm}^3$

③  $3 \times 3 \times 3.14 \times 3 \div 4 = 21.195$

答え  $21.195\text{cm}^3$

④  $2 \times 2 \times 3.14 \times 2.5 = 31.4$

$2 \times 2 \times 3.14 \times 2.5 \div 4 = 7.85$

$31.4 - 7.85 = 23.55$

答え  $23.55\text{cm}^3$

## 24

### 体積⑥ 円柱の体積③

P50・51

### 1

①  $10 \times 10 \times 3.14 \times 20 = 6280$

$20 \times 20 \times 3.14 \times 10 = 12560$

$6280 + 12560 = 18840$

答え  $18840\text{cm}^3$

②  $4 \div 2 = 2$

$2 \times 2 \times 3.14 \times 14 = 175.84$

$18 \div 2 = 9$

$$9 \times 9 \times 3.14 \times 6 = 1526.04$$

$$175.84 + 1526.04 = 1701.88$$

答え 1701.88 cm<sup>3</sup>

③  $(5 + 10 + 5) \div 2 = 10$   
 $10 \times 10 \times 3.14 \times 15 \div 2 = 2355$   
 $10 \div 2 = 5$   
 $5 \times 5 \times 3.14 \times 15 \div 2 = 588.75$   
 $2355 + 588.75 = 2943.75$

**2** ①  $20 \times 20 \times 3.14 \times 50 = 62800$   
 $12 \times 12 \times 3.14 \times 50 = 22608$   
 $62800 - 22608 = 40192$

答え 40192 cm<sup>3</sup>

②  $10 \times 10 \times 3.14 \times 10 \div 2 = 1570$   
 $5 \times 5 \times 3.14 \times 10 \div 2 = 392.5$   
 $1570 - 392.5 = 1177.5$

答え 1177.5 cm<sup>3</sup>

**3** ①  $9 \times 9 \times 3.14 \times 12 = 3052.08$   
 $6 \times 6 \times 12 = 432$   
 $3052.08 - 432 = 2620.08$

答え 2620.08 cm<sup>3</sup>

②  $20 \times 20 \times 20 = 8000$   
 $8 \div 2 = 4$   
 $4 \times 4 \times 3.14 \times 20 = 1004.8$   
 $8000 - 1004.8 = 6995.2$

答え 6995.2 cm<sup>3</sup>

**25** 体積⑦  
**まとめ** P52・53

**1** ①  $32 \times 5 = 160$

答え 160 cm<sup>3</sup>

②  $25 \times 6 = 150$

答え 150 cm<sup>3</sup>

③  $20 \times 6 = 120$

答え 120 cm<sup>3</sup>

④  $110 \times 9 = 990$

答え 990 cm<sup>3</sup>

**2** ①  $2 \times 3 \times 4 = 24$

答え 24 cm<sup>3</sup>

②  $4 \times 4 \div 2 \times 4 = 32$

答え 32 cm<sup>3</sup>

③  $5 \times 1.6 \div 2 \times 4 = 16$

答え 16 cm<sup>3</sup>

④  $(7 + 9) \times 6 \div 2 \times 10 = 480$

答え 480 cm<sup>3</sup>

**3** ①  $1 \times 1 \times 3.14 \times 4 = 12.56$

答え 12.56 cm<sup>3</sup>

②  $8 \div 2 = 4$   
 $4 \times 4 \times 3.14 \times 6 = 301.44$

答え 301.44 cm<sup>3</sup>

③  $8 \times 8 \times 3.14 \times 10 \div 2 = 1004.8$

答え 1004.8 cm<sup>3</sup>

④  $2 \times 2 \times 3.14 \times 3.5 \div 4 = 10.99$

答え 10.99 cm<sup>3</sup>

**4** ①  $1 \times 1 \times 3.14 \times 1.5 = 4.71$   
 $2 \times 2 \times 3.14 \times 3 = 37.68$   
 $4.71 + 37.68 = 42.39$

答え 42.39 cm<sup>3</sup>

②  $12 \times 12 \times 3.14 \times 12 = 5425.92$   
 $6 \times 6 \times 3.14 \times 12 = 1356.48$   
 $5425.92 - 1356.48 = 4069.44$

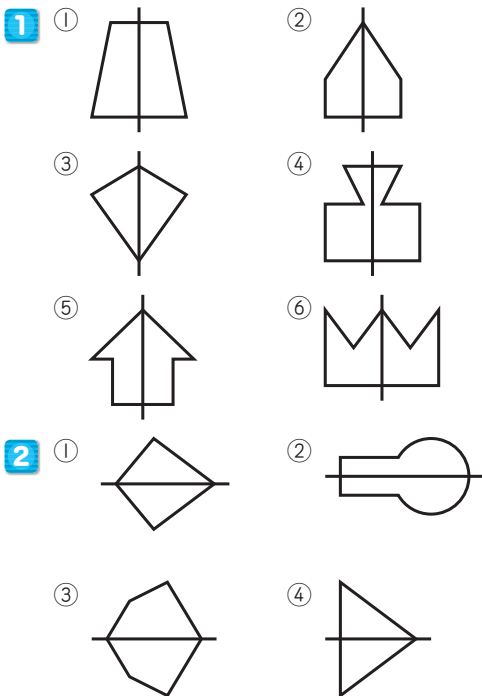
答え 4069.44 cm<sup>3</sup>

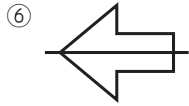
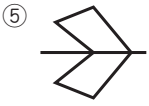
**26** 対称な形①  
**線対称①** P54・55

**1** ア, イ, ウ, エ, カ, ケ

**2** ア, エ, オ, カ, キ, ク, シに〇

**27** 対称な形②  
**線対称②** P56・57





- 3** ① 2本                      ② 2本  
 ③ 3本                      ④ 2本

**28**

対称な形③  
 線対称③

P58・59

- 1** ① 点ア……点ク  
 点イ……点キ  
 点ウ……点カ  
 点エ……点オ  
 ② 辺アイ…辺クキ  
 辺イウ…辺キカ  
 辺ウエ…辺カオ  
 ③ 角ア……角ク  
 角イ……角キ  
 角ウ……角カ  
 角エ……角オ

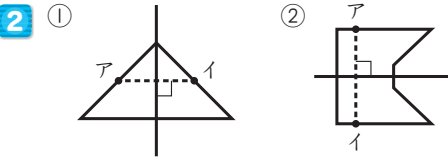
- 2** ① 点セ                      ② 点オ  
 ③ 辺カキ                ④ 4 cm  
 ⑤ 角ツ                    ⑥ 110°  
 ⑦ 直線アコ

**29**

対称な形④  
 線対称④

P60

- 1** ① 90°                      ② 90°  
 ③ 90°



**30**

対称な形⑤  
 線対称⑤

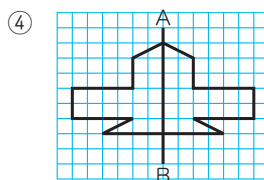
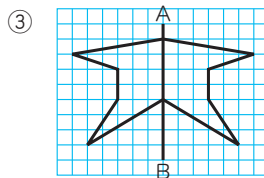
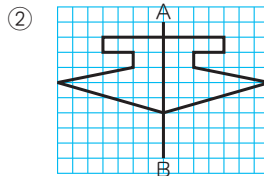
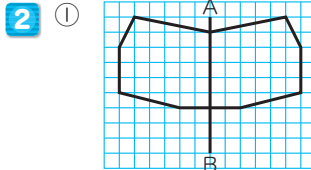
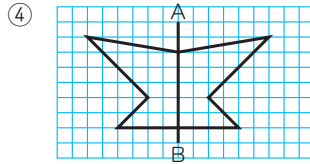
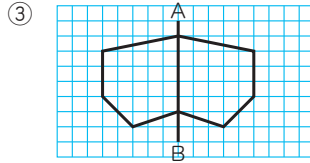
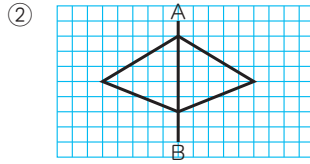
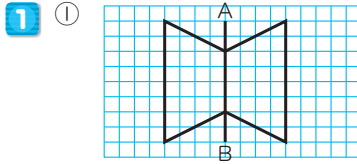
P61

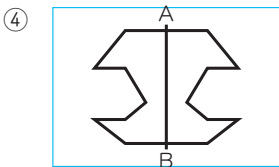
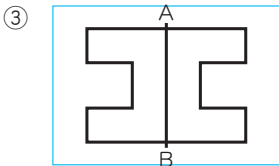
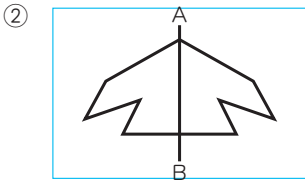
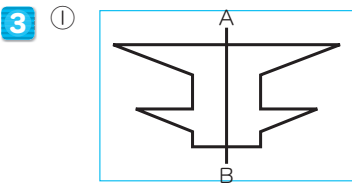
- 1** ① 直線カケ                ② 直線オコ  
**2** ① 6 cm                      ② 5 cm  
 ③ 8 cm

**31**

対称な形⑥  
 線対称⑥

P62・63





## 32

### 対称な形⑦ 点対称①

P64・65



## 33

### 対称な形⑧ 点対称②

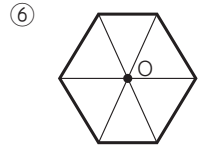
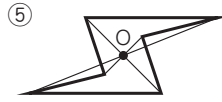
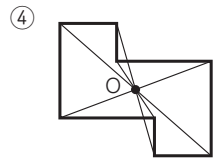
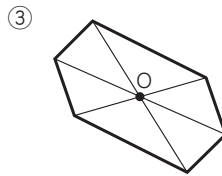
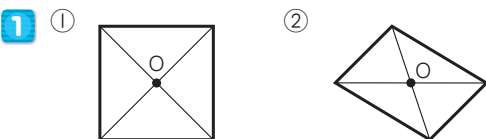
P66・67

- 1 ① 点 E                      ② 点 F  
 ③ 辺 E D                    ④ 辺 C B  
 ⑤ 角 E                        ⑥ 角 D
- 2 ① 点 O                      ② 直線 O E  
 ③ 直線 O F
- 3 ① 1.5 cm                    ② 110°  
 ③ 2.1 cm                     ④ 1.6 cm

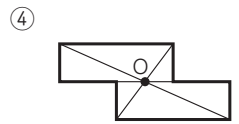
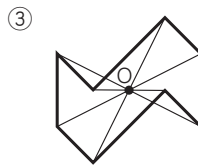
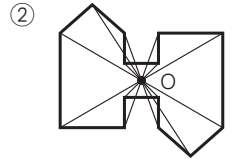
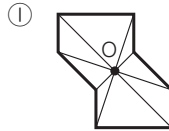
## 34

### 対称な形⑨ 点対称③

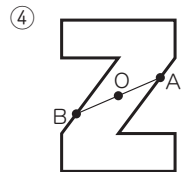
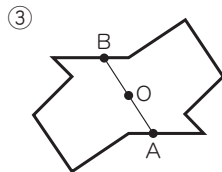
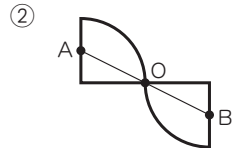
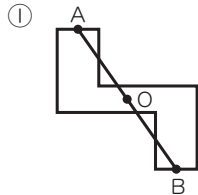
P68・69



## 2



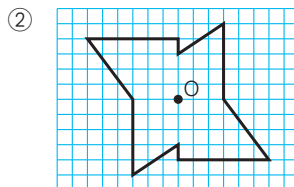
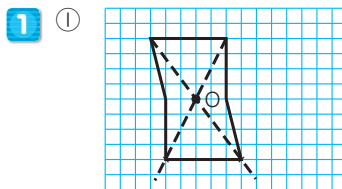
## 3

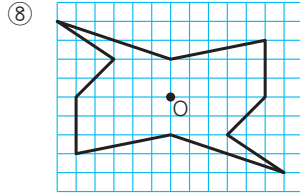
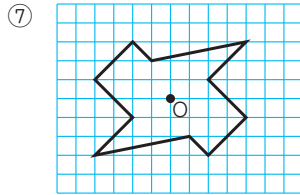
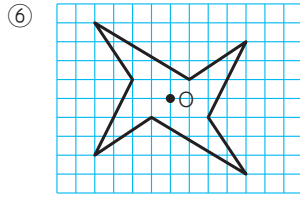
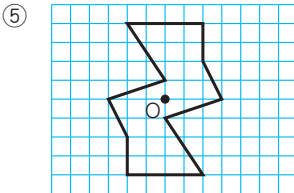
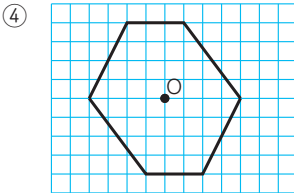
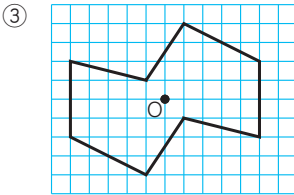
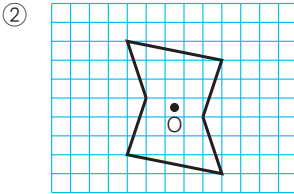
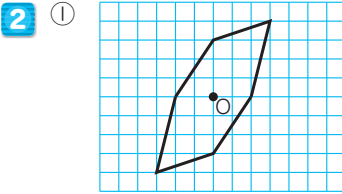
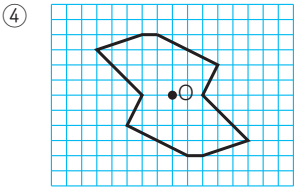
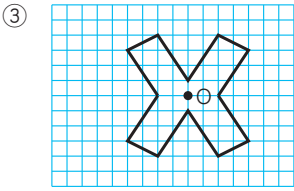


## 35

### 対称な形⑩ 点対称④

P70・71





## 36

### 対称な形① 四角形と対称

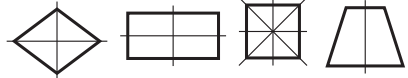
P72-73

- 1 ① ①, ウ, ⑤に○  
② ア, ①, ウ, ⑤に○  
③ ①, ウ, ⑤に○

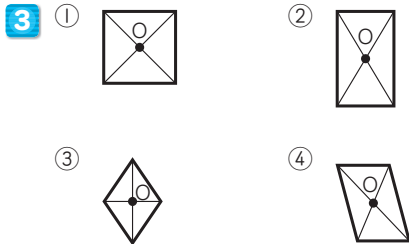
- 2 ① 2本 ② 2本  
③ 4本 ④ 1本

#### ポイント

2 対称の軸をかいてみましょう。



台形は、線対称になる形とならない形があるので注意しましょう。



- 4 ① ア, ウ, ⑤ ② ア, ①, ウ, ⑤  
③ ア, ウ, ⑤ ④ オ

# 37

## 対称な形⑫ 三角形と対称

P74-75

- 1 ① ×                      ② ○  
③ ○                      ④ ○
- 2 ① 1本                      ② 3本  
③ 1本

**ポイント**

2 対称の軸をかいてみましょう。



- 3 ① ア, イ, エ              ② ×  
③ ×                      ④ ウ

# 38

## 対称な形⑬ 対称な図形

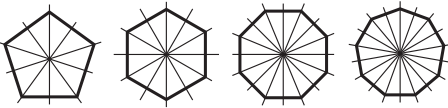
P76-77

- 1 ① ア, イ, ウ, エに○  
② イ, ウ, エに○  
③ イ, ウ, エに○

- 2 ① 5本                      ② 6本  
③ 8本                      ④ 9本

**ポイント**

2 対称の軸をかいてみましょう。



円の形に近づくほど、対称の軸は増えていきます。

- 3 ①               ② 

- 4 ① ア, イ, ウ, エ, オ  
② イ, エ, オ  
③ イ, エ, オ  
④ ×

**ポイント**

4 正多角形で点対称な図形の頂点の数は偶数です。

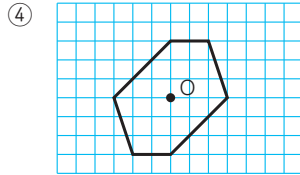
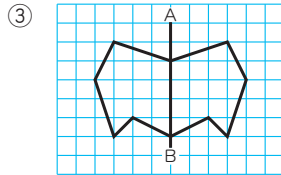
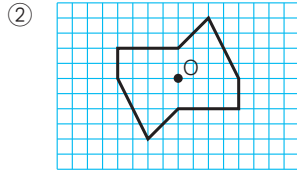
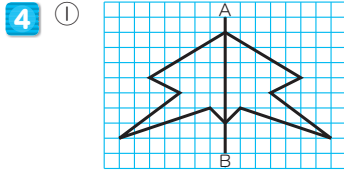
# 39

## 対称な形⑭ まとめ

P78-79

- 1 ① ○                      ② △  
③ ○                      ④ △

- 2 ① 点G                      ② 6.5cm  
③ 60°
- 3 ① 点F                      ② 18cm  
③ 45°



- 5 ① ア, イ, ウ, オ, カ  
② イ  
③ イ, ウ, エ, カ  
④ イ, ウ, カ

# 40

## 拡大図と縮図① 拡大図①

P80-81

- 1 ① エ                      ② ウ  
③ ウ, エ, オ
- 2 ① 3倍                      ② 2倍  
③ (例) いえる。対応する角の大きさがすべて等しく、対応する辺の長さが1.5倍になっているから。  
④ (例) いえない。対応する角の大きさが等しくなっていないから。
- 3 ① オ, キ

41

かくだいす しゅくす  
 拡大図と縮図②  
 かくだいす  
 拡大図②

P82・83

- 1 ① ㊦ ② ㊧  
 ③ 3倍
- 2 ① ㊦ ② ㊧
- 3 ㊧, 2倍

42

かくだいす しゅくす  
 拡大図と縮図③  
 しゅくす  
 縮図①

P84・85

- 1 ① ㊦ ② ㊧  
 ③ ㊧, ㊧, ㊦
- 2 ①  $\frac{1}{2}$  ②  $\frac{1}{3}$   
 ③ (例) いえる。対応する角の大きさが  
 すべて等しく、対応する辺の長さが $\frac{1}{3}$ 倍  
 になっているから。  
 ④ (例) いえない。対応する辺の長さの  
 比が等しくないから。
- 3 ㊧

43

かくだいす しゅくす  
 拡大図と縮図④  
 しゅくす  
 縮図②

P86・87

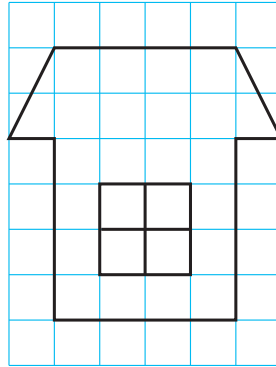
- 1 ① ㊦, ㊦ ② ㊦  
 ③ ㊦
- 2 ① ㊧ ② ㊧  
 ③  $\frac{1}{3}$
- 3 ① ○ ② ×  
 ③ ○ ④ ×

44

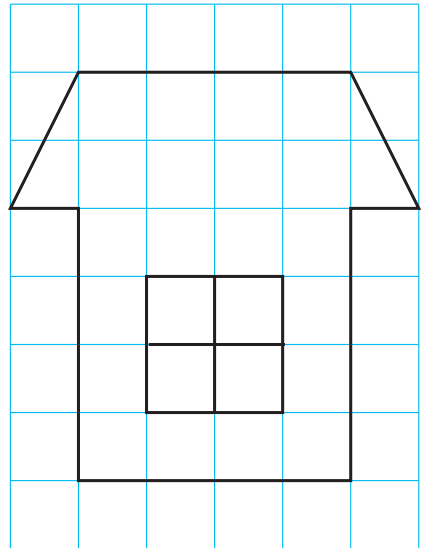
かくだいす しゅくす  
 拡大図と縮図⑤  
 かくだいす  
 拡大図③

P88・89

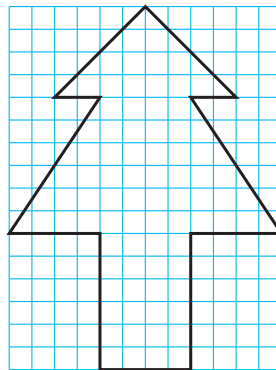
- 1 ① 2倍の拡大図



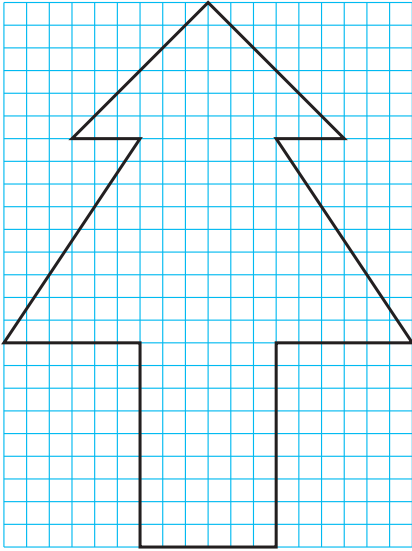
- ② 3倍の拡大図



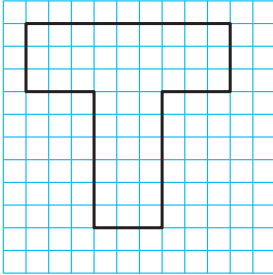
- 2 ① 2倍の拡大図



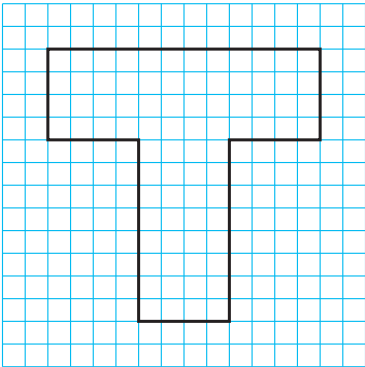
② 3倍の拡大図 かくだいず



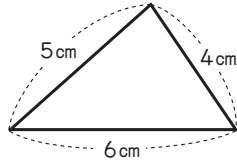
③ ① 1.5倍の拡大図 かくだいず



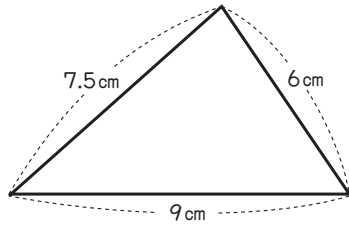
② 2倍の拡大図 かくだいず



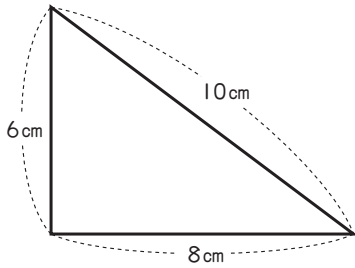
① ① 2倍の拡大図 かくだいず



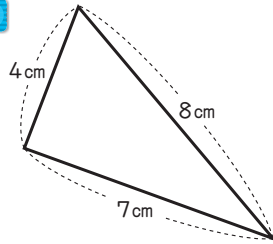
② 3倍の拡大図 かくだいず



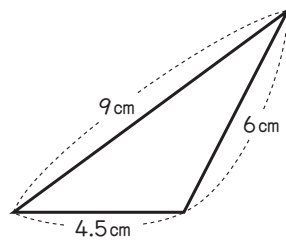
②



③

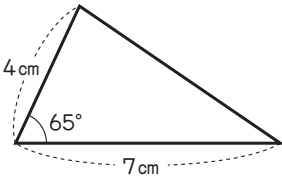


④

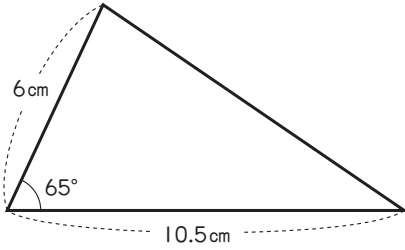




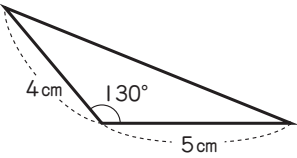
1 ① 2倍の拡大図 かくだいず



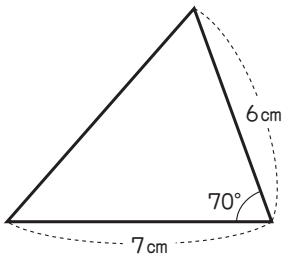
② 3倍の拡大図 かくだいず



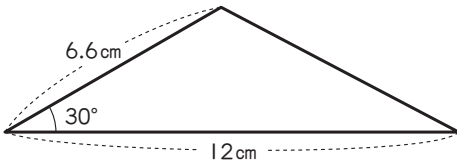
2



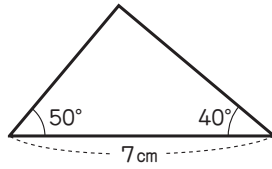
3



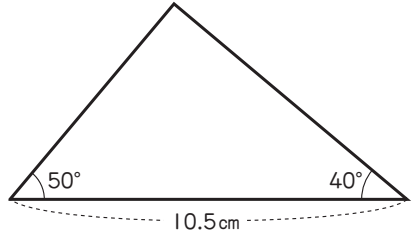
4



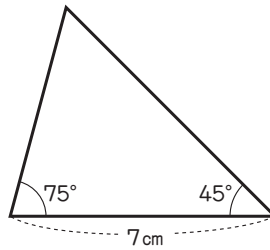
1 ① 2倍の拡大図 かくだいず



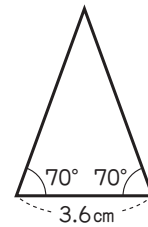
② 3倍の拡大図 かくだいず



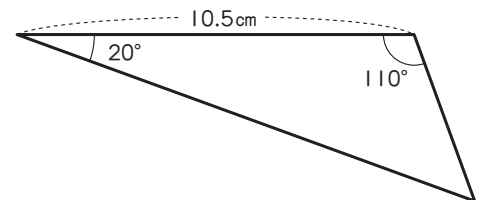
2



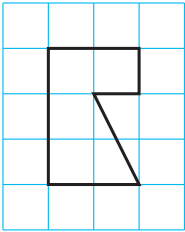
3



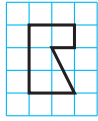
4



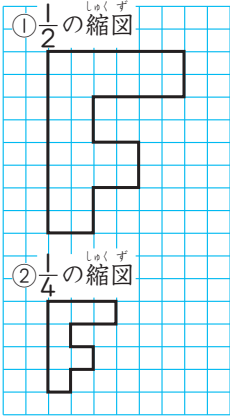
1 ①  $\frac{1}{2}$  の縮図



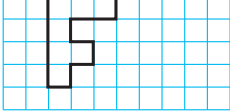
②  $\frac{1}{4}$  の縮図



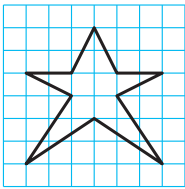
2 ①  $\frac{1}{2}$  の縮図



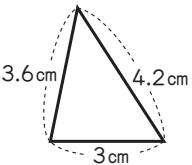
②  $\frac{1}{4}$  の縮図



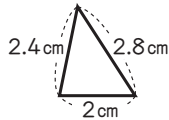
3



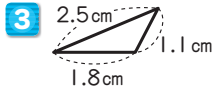
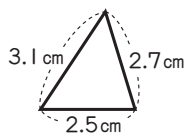
1 ①  $\frac{1}{2}$  の縮図



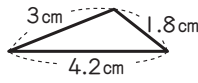
②  $\frac{1}{3}$  の縮図



2



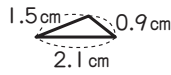
4 ①  $\frac{1}{2}$  の縮図



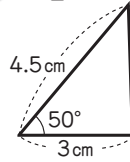
②  $\frac{1}{3}$  の縮図



③  $\frac{1}{4}$  の縮図



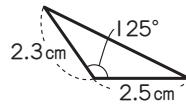
1 ①  $\frac{1}{2}$  の縮図



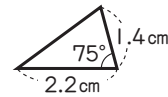
②  $\frac{1}{3}$  の縮図



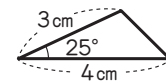
2



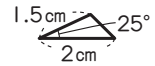
3



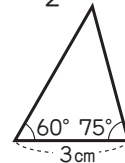
4 ①  $\frac{1}{2}$  の縮図



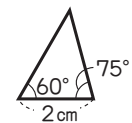
②  $\frac{1}{4}$  の縮図



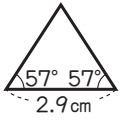
1 ①  $\frac{1}{2}$  の縮図



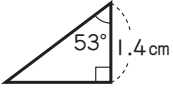
②  $\frac{1}{3}$  の縮図



2



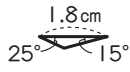
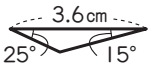
3



4

①  $\frac{1}{2}$  の縮図

②  $\frac{1}{4}$  の縮図



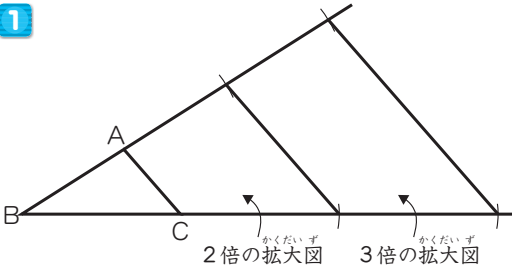
52

拡大図と縮図⑬

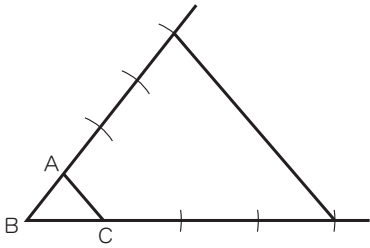
拡大図と縮図①

P104・105

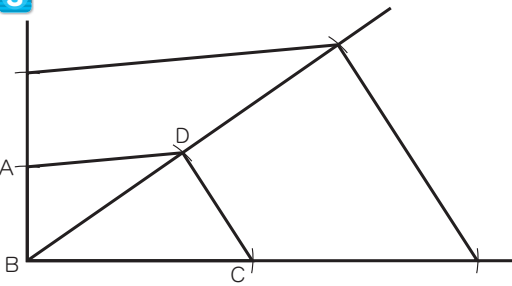
1



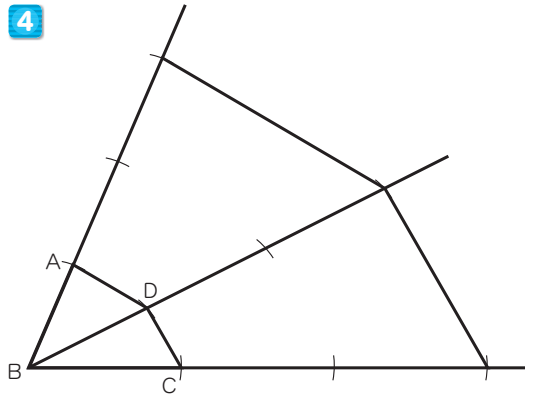
2



3



4



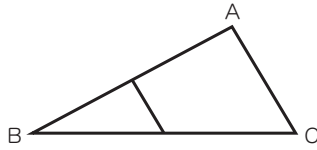
53

拡大図と縮図⑭

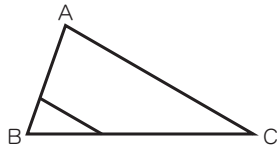
拡大図と縮図②

P106・107

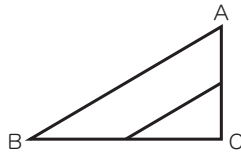
1



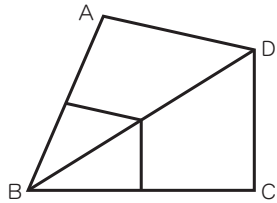
2



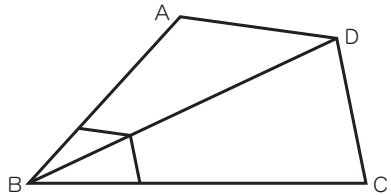
3



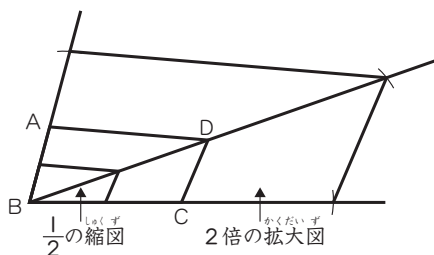
4



5



6



54

かくだいず しゅくす  
かくだいず しゅくす  
拡大図と縮図③

P108・109

- 1 ① 3倍 ②  $\frac{1}{3}$   
 ③ 頂点A→頂点D 頂点B→頂点E  
 頂点C→頂点F  
 ④ 辺AB→辺DE 辺BC→辺EF  
 辺CA→辺FD  
 ⑤ 角A→角D 角B→角E  
 角C→角F  
 ⑥ 角A…70° 角C…37°  
 角E…37°

- 2 ① 2倍 ②  $\frac{1}{2}$   
 ③ 60° ④ 30°

- 3 ①  $\frac{1}{2}$  ② 頂点E  
 ③ 辺EF ④ 辺CD  
 ⑤ 角E ⑥ 70°

55

かくだいず しゅくす  
かくだいず しゅくす  
拡大図と縮図④

P110・111

- 1 ① 3倍 ② 4.5cm  
 ③ 2cm

- 2 ①  $\frac{1}{2}$  ② 4cm  
 ③ 2.5cm

- 3 ① 2倍 ②  $\frac{1}{2}$   
 ③ 2.5cm ④ 2cm  
 ⑤ 6cm ⑥ 1:2  
 ⑦ 8cm ⑧ 7.4cm

56

かくだいず しゅくす  
かくだいず しゅくす  
拡大図と縮図⑤

P112・113

- 1 ①  $\frac{1}{1000}$

②  $4 \times 1000 = 4000$   
 $4000\text{cm} = 40\text{m}$

答え 40m

2 ①  $1 \times 1500 = 1500$   
 $1500\text{cm} = 15\text{m}$

答え 15m

②  $1.8 \times 1500 = 2700$   
 $2700\text{cm} = 27\text{m}$

答え 27m

3 ①  $3 \times 5000 = 15000$   
 $15000\text{cm} = 150\text{m}$

答え 150m

②  $2 \times 2500 = 5000$   
 $5000\text{cm} = 50\text{m}$

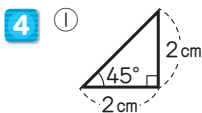
答え 50m

③  $10 \times 10000 = 100000$   
 $100000\text{cm} = 1000\text{m}$   
 $1000\text{m} = 1\text{km}$

答え 1km

④  $0.4 \times 50000 = 20000$   
 $20000\text{cm} = 200\text{m}$   
 $200\text{m} = 0.2\text{km}$

答え 0.2km



② 2m  
 $\left[ \begin{array}{l} 2 \times 100 = 200 \\ 200\text{cm} = 2\text{m} \end{array} \right]$

③  $2 + 1.2 = 3.2$

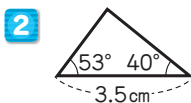
答え 3.2m

57

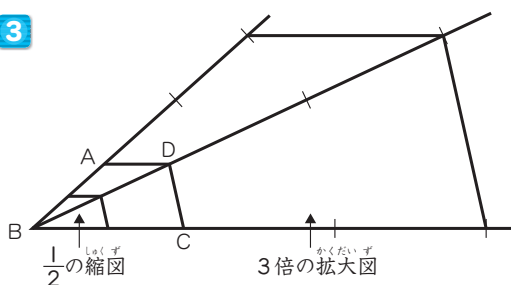
かくだいず しゅくす  
かくだいず しゅくす  
拡大図と縮図⑧  
まとめ

P114・115

- 1 ① ㊦, 3倍 ② ㊦,  $\frac{1}{2}$



3

4 ①  $\frac{1}{3}$                       ②  $34^\circ$ 

③ 1.5 cm

5 ①  $500\text{m} = 50000\text{cm}$   
 $50000 \div 1000 = 50$ (または、 $50000 \times \frac{1}{1000} = 50$ )

答え 50cm

②  $8 \times 25000 = 200000$   
 $200000\text{cm} = 2\text{km}$ 

答え 2km

58

単位の関係①

大きさを表すことば

P116・117

1 ① mm, cm, m, km

② a, ha

③ mL, dL, L, kL

④ mg, g, kg

2 ① m                              ② cm

③ a                                ④ g

⑤ mL

3 ①  $\frac{1}{1000}$                       ② 100

③ 1000

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単位の関係②

長さの単位①

P118・119

1 ① 40                              ② 90

③ 70                                ④ 60

⑤ 6                                 ⑥ 6.5

⑦ 3                                 ⑧ 3.5

⑨ 5                                 ⑩ 5.3

⑪ 4                                 ⑫ 4.9

⑬ 20                               ⑭ 28

⑮ 72

2 ① 300                              ② 900

③ 500                              ④ 700

⑤ 1000                            ⑥ 3600

⑦ 6

⑧ 40

⑨ 93

⑩ 0.2

⑪ 680

⑫ 0.9

⑬ 0.005

⑭ 4

⑮ 63

⑯ 5

⑰ 1.4

⑱ 75

⑲ 0.08

⑳ 3.2

3

60

単位の関係③

長さの単位②

P120・121

1 ① 3000                          ② 8000

③ 6000                          ④ 4000

⑤ 20000                        ⑥ 29000

⑦ 70000                        ⑧ 71000

⑨ 5                                ⑩ 5.3

⑪ 9                                ⑫ 9.6

⑬ 10                              ⑭ 30

⑮ 16

2 ① 2000                          ② 7000

③ 5000                          ④ 3000

⑤ 40000                        ⑥ 66000

⑦ 9                                ⑧ 2

⑨ 80                              ⑩ 61

3 ① 1500                          ② 200

③ 57                              ④ 0.058

⑤ 0.4                              ⑥ 1.9

⑦ 6300                         ⑧ 630

⑨ 9.6                             ⑩ 0.096

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単位の関係④

面積の単位①

P122・123

1 ① 30000                        ② 50000

③ 20000                        ④ 90000

⑤ 100000                      ⑥ 110000

⑦ 400000                      ⑧ 440000

⑨ 7                                ⑩ 7.2

⑪ 8                                ⑫ 8.5

⑬ 20                              ⑭ 23

⑮ 16

2 ① 800                            ② 600

③ 2500                         ④ 4

⑤ 40                              ⑥ 90000

⑦ 30000                        ⑧ 120000

⑨ 5                                ⑩ 57

3 ① 33000                        ② 2.5

③ 290                            ④ 7.2

- ⑤ 480                      ⑥ 9.6
- ⑦ 5000                     ⑧ 81000
- ⑨ 1                            ⑩ 1.7

## 62

### 単位の関係⑤ 面積の単位②

P124・125

- 1**
- ① 6000000                  ② 3000000
  - ③ 10000000               ④ 19000000
  - ⑤ 40000000               ⑥ 42000000
  - ⑦ 800000                   ⑧ 1030000
  - ⑨ 9                            ⑩ 2.4
  - ⑪ 0.14
- 2**
- ① 20000                    ② 90000
  - ③ 100000                   ④ 170000
  - ⑤ 300000                   ⑥ 360000
  - ⑦ 7000                      ⑧ 0.4
  - ⑨ 6.5                        ⑩ 80
  - ⑪ 0.91
- 3**
- ① 300                        ② 400
  - ③ 1700                      ④ 5000
  - ⑤ 360                        ⑥ 2
  - ⑦ 23                         ⑧ 60
  - ⑨ 0.18

## 63

### 単位の関係⑥ 体積の単位①

P126・127

- 1**
- ① 70                         ② 50
  - ③ 3                           ④ 4
  - ⑤ 1.24                      ⑥ 2000
  - ⑦ 8000                     ⑧ 1050
  - ⑨ 9                           ⑩ 0.61
  - ⑪ 500                       ⑫ 900
  - ⑬ 180                       ⑭ 4
  - ⑮ 3.7
- 2**
- ① 2000                      ② 6000
  - ③ 5000                      ④ 28000
  - ⑤ 1900                      ⑥ 3400
  - ⑦ 300                        ⑧ 7050
  - ⑨ 12100                    ⑩ 90
- 3**
- ① 4                            ② 9
  - ③ 8                            ④ 23
  - ⑤ 3.6                        ⑥ 76
  - ⑦ 0.15                      ⑧ 0.141
  - ⑨ 1.07                      ⑩ 49.3

## 64

### 単位の関係⑦ 体積の単位②

P128・129

- 1**
- ① 8000000                  ② 12000000
  - ③ 6200000                  ④ 3000
  - ⑤ 70000                    ⑥ 90
  - ⑦ 200                        ⑧ 6700
  - ⑨ 6                            ⑩ 5.3
  - ⑪ 0.7                        ⑫ 8
  - ⑬ 90                         ⑭ 5.1
  - ⑮ 4                            ⑯ 30
  - ⑰ 75000
- 2**
- ① 4                            ② 7
  - ③ 30                         ④ 35
  - ⑤ 6                            ⑥ 4
  - ⑦ 90                         ⑧ 0.8
  - ⑨ 3                            ⑩ 0.9
  - ⑪ 0.006                    ⑫ 2
  - ⑬ 7000                     ⑭ 320
  - ⑮ 5000                     ⑯ 18000
  - ⑰ 40000                   ⑱ 1400
  - ⑲ 80000                   ⑳ 90000
  - ㉑ 100                        ㉒ 20030

## 65

### 単位の関係⑧ 重さの単位①

P130・131

- 1**
- ① 7000                      ② 2000
  - ③ 3000                      ④ 90000
  - ⑤ 16000                    ⑥ 2300
  - ⑦ 900                        ⑧ 5
  - ⑨ 8                            ⑩ 4
  - ⑪ 60                         ⑫ 290
  - ⑬ 0.075                    ⑭ 4.8
- 2**
- ① 2000                      ② 6000
  - ③ 9000                      ④ 8000
  - ⑤ 10000                    ⑥ 13000
  - ⑦ 40000                    ⑧ 45000
  - ⑨ 130000                   ⑩ 3400
  - ⑪ 700                        ⑫ 50200
  - ⑬ 5                            ⑭ 3
  - ⑮ 9                            ⑯ 2
  - ⑰ 70                         ⑱ 80
  - ⑲ 540                       ⑳ 1.7
  - ㉑ 0.3                        ㉒ 0.65
  - ㉓ 0.052                    ㉔ 0.009

## 66

単位の関係⑨  
重さの単位②

P132・133

- 1 ① 7000000      ② 3000000  
 ③ 4000000      ④ 50000000  
 ⑤ 26000000     ⑥ 8200000  
 ⑦ 1090000      ⑧ 6  
 ⑨ 8                ⑩ 2  
 ⑪ 79              ⑫ 210  
 ⑬ 0.43            ⑭ 0.000006
- 2 ① 5000            ② 8000  
 ③ 3000            ④ 10000  
 ⑤ 70000          ⑥ 29000  
 ⑦ 40000          ⑧ 45000  
 ⑨ 3800            ⑩ 70  
 ⑪ 9                ⑫ 4  
 ⑬ 6                ⑭ 6.5  
 ⑮ 100             ⑯ 120  
 ⑰ 30.8            ⑱ 0.82  
 ⑲ 0.097          ⑳ 0.006  
 ㉑ 0.003          ㉒ 0.002  
 ㉓ 9                ㉔ 0.074

## 67

単位の関係⑩  
水の体積と重さ①

P134・135

- 1 ① 2g              ② 4g  
 ③ 67g            ④ 190g  
 ⑤ 5100g          ⑥ 11.2g  
 ⑦ 0.9g            ⑧ 3g  
 ⑨ 8g              ⑩ 70g  
 ⑪ 320g            ⑫ 4000g  
 ⑬ 7.9g            ⑭ 5.03g
- 2 ① 5kg             ② 8kg  
 ③ 10kg            ④ 17kg  
 ⑤ 20kg            ⑥ 2.4kg  
 ⑦ 4.9kg           ⑧ 0.6kg  
 ⑨ 0.0015kg      ⑩ 0.0003kg  
 ⑪ 7kg             ⑫ 4kg  
 ⑬ 60kg            ⑭ 62kg  
 ⑮ 40kg            ⑯ 48kg  
 ⑰ 900kg          ⑱ 910kg  
 ⑲ 31000kg       ⑳ 0.7kg  
 ㉑ 400g            ㉒ 1800g  
 ㉓ 30000g        ㉔ 5g

## 68

単位の関係⑪  
水の体積と重さ②

P136・137

- 1 ① 2t                ② 9t  
 ③ 30t              ④ 80t  
 ⑤ 400t            ⑥ 513t  
 ⑦ 6000t          ⑧ 1.25t  
 ⑨ 7t                ⑩ 4t  
 ⑪ 18t              ⑫ 60t  
 ⑬ 27t              ⑭ 370t  
 ⑮ 46500t        ⑯ 0.2t
- 2 ① 4cm<sup>3</sup>            ② 150cm<sup>3</sup>  
 ③ 73.8cm<sup>3</sup>       ④ 8000cm<sup>3</sup>  
 ⑤ 26000cm<sup>3</sup>      ⑥ 300cm<sup>3</sup>  
 ⑦ 12m<sup>3</sup>            ⑧ 90m<sup>3</sup>  
 ⑨ 3.1m<sup>3</sup>           ⑩ 17mL  
 ⑪ 4dL              ⑫ 1L  
 ⑬ 0.05kL

## 69

単位の関係⑫  
まとめ

P138・139

- 1 ① 1000            ②  $\frac{1}{1000}$   
 ③ 100             ④ 10000  
 ⑤  $\frac{1}{10}$              ⑥  $\frac{1}{1000}$
- 2 ① t                ② mm  
 ③ cm<sup>2</sup>            ④ kL(m<sup>3</sup>)
- 3 ① 90mm           ② 500cm  
 ③ 23000m        ④ 48km  
 ⑤ 160000cm<sup>2</sup>    ⑥ 20m<sup>2</sup>  
 ⑦ 12500m<sup>2</sup>      ⑧ 30000000m<sup>2</sup>  
 ⑨ 46kL            ⑩ 1400cm<sup>3</sup>  
 ⑪ 92000cm<sup>3</sup>     ⑫ 5L  
 ⑬ 0.027g        ⑭ 36.5kg  
 ⑮ 180kg          ⑯ 6000000mg  
 ⑰ 540g            ⑱ 940kg  
 ⑲ 0.07m<sup>3</sup>        ⑳ 1300t

## 70

## 6年の復習①

P140・141

- 1 ①  $\frac{13}{20}$             ②  $1\frac{1}{6}$   
 ③  $\frac{29}{60}$             ④  $3\frac{11}{30}$
- 2 ① 37                ② 64

- ③ 20                      ④ 174  
 ⑤ 9.8                      ⑥ 42000  
 ⑦ 2050000                ⑧ 3600  
 ⑨ 15000                    ⑩ 7000  
 ⑪ 7000000                ⑫ 2.3  
 ⑬ 0.8                      ⑭ 1.4

3  $12 \div 2 = 6$   
 $6 \times 6 \times 3.14 = 113.04$

答え  $113.04 \text{ cm}^2$

4  $4 \times 6 \div 2 = 12$   
 $12 \times 5 = 60$

答え  $60 \text{ cm}^3$

- 5 ①  $\triangle$                       ②  $\times$   
 ③  $\circ$                         ④  $\triangle$

6 ①  $\frac{1}{2}$                       ② 18cm  
 ③  $14.4 \div 2 = 7.2$

答え 7.2cm

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### 6年の復習②

P142-143

- 1 ① 2                        ② 133  
 ③ 102                      ④ 19

- 2 ① 8000000mg            ② 300m<sup>2</sup>  
 ③ 2500m                    ④ 17g


3 ①  $40 \div 2 = 20$   
 $20 \times 20 \times 3.14 \div 2 = 628$   
 $20 \div 2 = 10$   
 $10 \times 10 \times 3.14 = 314$   
 $628 - 314 = 314$

答え  $314 \text{ cm}^2$

②  $20 \times 20 = 400$   
 $20 \div 2 = 10$   
 $10 \times 10 \times 3.14 = 314$   
 $400 - 314 = 86$

答え  $86 \text{ cm}^2$

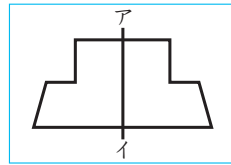
#### ポイント

3② 白い部分をあわせると、半径が10cmの円になります。正方形の面積から円の面積をひくと、部分の面積が求められます。

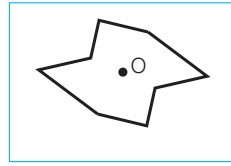
4 ①  $9 \div 2 = 4.5$   
 $4.5 \times 4.5 \times 3.14 \times 10 = 635.85$   
 答え  $635.85 \text{ cm}^3$

②  $5 \times 4 \times 1.8 = 36$   
 答え  $36 \text{ cm}^3$

5 ①



②



6 たて： $8 \times 5000 = 40000$   
 $40000 \text{ cm} = 400 \text{ m}$

横： $9 \times 5000 = 45000$   
 $45000 \text{ cm} = 450 \text{ m}$

答え たて400m, 横450m