

## 解 答

- |                                   |                 |  |
|-----------------------------------|-----------------|--|
| I (1) ① $\frac{17}{20}$           | ② $\frac{1}{3}$ | ③ ア 100 イ 24 ウ 145 エ 17                    |
| (2) 22 cm                         |                 | (3) ① 105.8 m ② 6.28 m                     |
| II (1) 7.2 g                      |                 | (2) 6.9% (3) B から A へ $5\frac{5}{9}$ g     |
| III (1) 13 枚                      | (2) 82620 個     |  |
| IV (1) 12 cm, 14 cm, 16 cm, 18 cm | (2) 赤いブロックを 5 個 | (3) 49 cm                                  |
| V (1) 44 分 21 秒後                  | (2) 217.5       | (3) $96\frac{2}{3}$ (4) $318\frac{8}{9}$ m |

## 解 説

- I (1)③ア  $10 \times 10 = 100$   
 イ  $576 = 24 \times 24 \rightarrow 24$   
 ウ  $10 + (1+2+\dots+9) \times 3 = 145$   
 (アの 100 + (1+2+…+9) = 145)  
 エ  $17 + (1+2+\dots+16) \times 3 = 425 \rightarrow 17$   
 (2) 上…  $3 \times 4 \times (3+6) \div 2 = 54$  (cm<sup>3</sup>)  
 下…  $54 + 156 = 210$  (cm<sup>3</sup>)  
 全体…  $54 + 210 = 264$  (cm<sup>3</sup>)  
 $264 \div (3 \times 4) = 22$  (cm)  
 (3)①  $(400 - 60 \times 3.14) \div 2 = 105.8$  (m)  
 ②  $(63 - 61) \times 3.14 = 6.28$  (m)

- II (1)  $200 \times 0.03 = 6$  (g)  
 $6 + 10 \times (0.15 - 0.03) = 7.2$  (g)  
 (2)  $100 \times 0.15 - 1.2 = 13.8$  (g)  
 $13.8 \div (100 + 100) = 0.069 \rightarrow 6.9\%$   
 (3)  $(15+6) \times \frac{1}{3} = 7$  (g)  
 $7.2 \div 200 = 0.036$   
 $(7.2 - 7) \div 0.036 = 5\frac{5}{9}$  (g) → B から A へ

- III (1)  $200 \times 500 \times 1 = 100000$  (cm<sup>3</sup>)  
 $180 \div 2 = 90$  (cm<sup>3</sup>)  
 $90 \times 1020 = 91800$  (cm<sup>3</sup>)  
 $100000 \div (100000 - 91800) = 12$  あまり 1600 → 13 枚  
 (2)  $1020 \times 75 = 76500$  (個)  
 $8200 \times 75 \div 100000 = 6$  あまり 15000  
 $1020 \times 6 = 6120$  (個)  
 $76500 + 6120 = 82620$  (個)

- IV (1) 青・青・青…  $4 \times 3 = 12$  (cm)  
 青を赤に変えると (6 - 4 =) 2 cm 伸びる。  
 12 cm, 14 cm, 16 cm, 18 cm  
 (2) 赤・赤・赤・赤・赤  
 6 6 6 5 5  
 (3) 赤・赤・赤・赤・赤・赤・青・青・青・青  
 6 6 6 5 5 4 4 4 4  
 $6 \times 3 + 5 \times 3 + 4 \times 4 = 49$  (cm)

V (1) 時速  $2.4 \text{ km} = \text{分速 } 40 \text{ m}$ , 時速  $3 \text{ km} = \text{分速 } 50 \text{ m}$

$$20 + 430 \div 40 + 5 + 430 \div 50 = 44\frac{7}{20} \text{ (分)} \rightarrow 44 \text{ 分 } 21 \text{ 秒後}$$

$$(2) 50 \times (24\frac{7}{20} - 20) = 217.5 \text{ (m)}$$

$$(3) 50 : 40 = 5 : 4$$

$$217.5 \times \frac{4}{5+4} = 96\frac{2}{3} \text{ (m)}$$

$$(4) (10 - 5) : (34\frac{7}{20} - 20) = 100 : 287$$

$$430 \times \frac{287}{100+287} = 318\frac{8}{9} \text{ (m)}$$