

$$\text{① (1)} \quad 145 - (23 + 117 \div 3) \times 2 = \underline{\underline{21}}$$

$\begin{array}{c} \text{39} \\ \text{62} \quad \text{124} \end{array}$

$$\begin{aligned} \text{(2)} \quad & 1.3 \times 9 - 4 \times 1.3 + 15 \times 1.3 \\ &= 1.3 \times 9 - 4 \times 1.3 + 15 \times 1.3 \\ &= 1.3 \times (9 - 4 + 15) = \underline{\underline{26}} \end{aligned}$$

$\begin{array}{c} \text{20} \end{array}$

$$\text{(3)} \quad 4\frac{1}{2} + \frac{1}{9} - \left\{ 1\frac{1}{4} - (2 - \frac{1}{2}) \div 2 \right\}$$

$\begin{array}{c} \text{3} \\ \text{2} \quad \text{3} \\ \text{4} \end{array}$

$$\begin{aligned} &= 4\frac{1}{2} + \frac{1}{9} - \frac{1}{2} \\ &= \underline{\underline{4\frac{1}{9}}} \end{aligned}$$

$$\begin{aligned} \text{(4)} \quad & 14.4 \times 1.25 \div \frac{12}{13} \times (1.5 - 0.7) \\ &= \frac{144}{10} \times \frac{5}{4} \times \frac{13}{12} \times \frac{8}{10} = \frac{78}{5} = \underline{\underline{15\frac{3}{5}}} \quad (\text{又は } 15.6) \end{aligned}$$

$$\begin{aligned} \text{(5)} \quad & \frac{1}{2} \times (1 - \frac{1}{3}) + \frac{1}{2} \times (\frac{1}{3} - \frac{1}{5}) + \frac{1}{5 \times 7} \\ &= \frac{1}{3} + \frac{1}{15} + \frac{1}{5 \times 7} \\ &= \frac{35 + 7 + 3}{3 \times 5 \times 7} \\ &= \frac{45}{105} = \underline{\underline{\frac{3}{7}}} \end{aligned}$$

$$(6) 1 - \left\{ \left(3 - \frac{11}{12} \right) \times 0.2 - \square \right\} \div \left(\frac{1}{2} + \frac{1}{3} \right) = \frac{5}{6}$$

$\frac{25}{12}$ $\frac{5}{6}$

$$1 - \left(\frac{5}{12} - \square \right) \div \frac{5}{6} = \frac{5}{6}$$

$\textcircled{1}$ $\textcircled{2}$

$$1 - \textcircled{2} = \frac{5}{6} \quad \textcircled{2} = 1 - \frac{5}{6} = \frac{1}{6}$$

$$\textcircled{1} \div \frac{5}{6} = \frac{1}{6} \quad \textcircled{1} = \frac{5}{6} \times \frac{1}{6} = \frac{5}{36}$$

$$\frac{5}{12} - \square = \frac{5}{36} \quad \square = \frac{5}{12} - \frac{5}{36} = \frac{15}{36} - \frac{5}{36} = \frac{10}{36} = \frac{5}{18}$$

② (1)

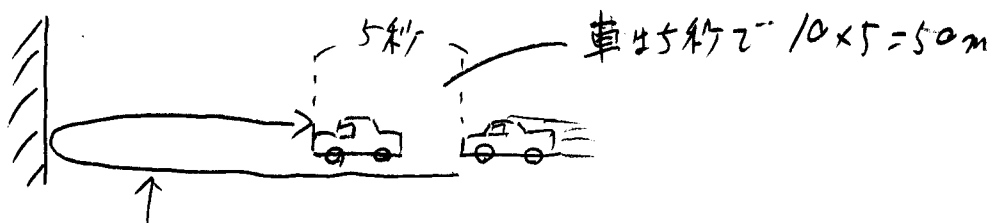
$480\text{m} = \textcircled{2} \times \frac{4}{7} \quad \textcircled{2} = 480 \div \frac{4}{7} = 840$

$$3750 + 840 = 4590 \dots \textcircled{1} \times \frac{3}{5}$$

$$\textcircled{1} = 4590 \div \frac{3}{5} = \frac{1530}{1} \times \frac{5}{3} = 7650$$

A. 7650m

(2) 時速 36km = $3600\text{m} \div 3600\text{秒} = \text{秒速 } 10\text{m}$



$$\text{音} 5\text{秒} \text{で } 350 \times 5 = 1750\text{m}$$

$$\text{両方} \text{で } 1750 + 50 = 1800\text{m}$$

$$1800 \div 2 = 900$$

A. 900m

(3) $A 100g + B 200g$ と 計

PL2-1Lは $100 \times 0.375 + 200 \times 0.25 = 37.5 + 50 = 87.5$

水は $300 - 87.5 = 212.5$

$87.5 : 212.5 = 7 : 17$

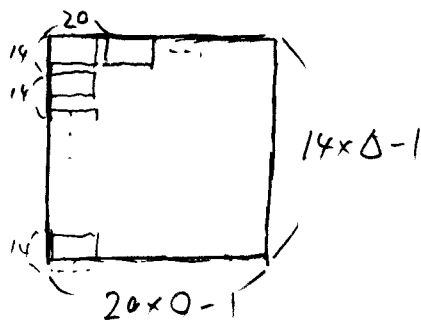
A. 7:17

(4) $x > 6$ のとき $x - 6 = 4$ $x = 6 + 4 = 10$
 $x < 6$ のとき $6 - x = 4$ $x = 6 - 4 = 2$ $2 < x < 10$

A 3, 4, 5, 6, 7, 8, 9

注4より → 4は含まない

(5)



$2 \overline{) 14, 20} \rightarrow 2 \times 7 \times 10 = 140 \text{ cm}$
 $7, 10$

\downarrow
 $140 - 1 = 139 \text{ cm}$
 正方形

$140 \text{ cm} \rightarrow$ 縦 10個
 横 7個 $\} 10 \times 7 = 70$

A 70個

[3] (1) 百 十 一
 1 0 2 3 4
 2
 3
 4
 $4 \times 4 \times 3 = 48$

A. 48種(個)

(2) 一の位から

一 十 百
 0 1 2 3 4
 $4 \times 3 = 12$

一 十 百
 2 0 1 2 3 4
 (4) $\} (3 + 2 \times 3) \times 2 = 18$
 $12 + 18 = 30$

A 30種(個)

④

体積

$$1つで 4 \times 4 \times 4 = 64 \text{ cm}^3$$

使っている数

$$1 + 2 \times 2 + 4 \times 4 + 5 \times 5 = 46 \text{ 個}$$

$$64 \times 46 = 2944$$

$$A 2944 \text{ cm}^3$$

表面積

$$\text{上下から見ると } \overbrace{(4 \times 5)}^{1辺} \times (4 \times 5) \times \overset{\text{上下}}{\downarrow} 2 = 800$$

前後左右

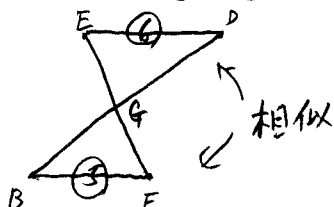
$$\underbrace{(1+2+4+5)}_{\text{正方形の数}} \times \underbrace{(4 \times 4)}_{\text{正方形1個}} \times \underbrace{4}_{\text{方向}} = 768$$

1568

$$A. 1568 \text{ cm}^2$$

⑤ (1) ADの長さを1とすると $ED = \frac{4}{5}$ $BF = \frac{2}{3}$

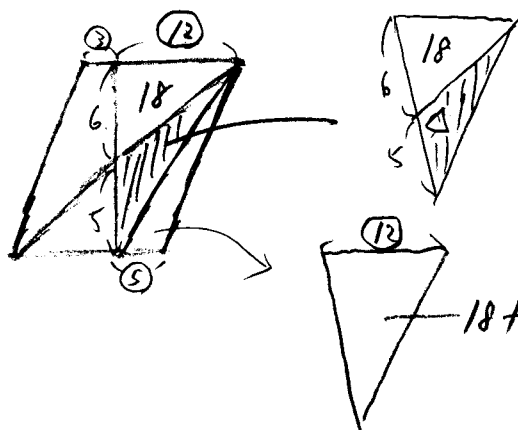
$$ED:BF = \frac{4}{5} : \frac{2}{3} = 6:5$$



$$A 6:5$$

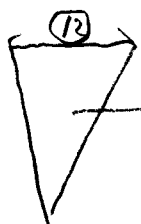
(2) ADの長さを1とすると $AE:FC = \frac{1}{5} : \frac{1}{5} = 3:5$

AEを③とすると $FC = ⑤$ $AD = BC = ⑮$



$$6:5 = 18:x$$

$$\Delta = 18 \times 5 \div 6 = 15 \text{ cm}^2$$



$$18 + 15 = 33$$



$$= 12:5$$



$$= 33 \times 5 \div 12 = \frac{55}{4} = 13.75$$

$$15 + 13.75 = 28.75$$

$$A. 28.75 \text{ cm}^2$$

- ④ (1) Aは10分で20cm減る (1分2cm)
Bは5分で5cm入る (1分1cm)

$$Aの底面 \times 2cm = Bの底面 \times 1cm$$

$$\therefore Aの底面 : Bの底面 = 1 : 2$$

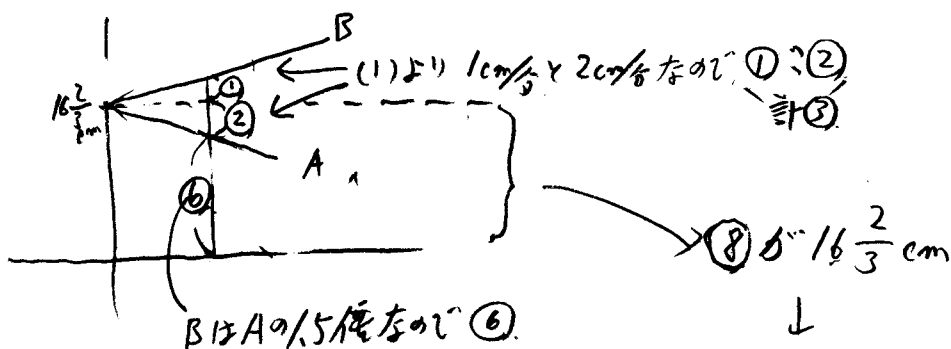
A. 2倍

- (2) 深さが等しくなる時を求めよ

$$15分のとき Aは $80 - 2 \times 15 = 50cm$$$

$$50cm \div (2+1) = \frac{50}{3}分 = 16\frac{2}{3}分 \rightarrow 31\frac{2}{3}分のとき深さが等しくなる$$

$$1cm/分 \times 16\frac{2}{3}分 = 16\frac{2}{3}cm \dots \text{その時の深さ}$$



$$\downarrow$$

$$① = 16\frac{2}{3} \div 8 = \frac{50}{3} \times \frac{1}{8} = \frac{25}{12}cm$$

$\frac{25}{12}$ 分後

Bに水を入れたはじめて $16\frac{2}{3}分$ で同じ深さになる, その $\frac{25}{12}分$ 後に 1.5倍

$$16\frac{2}{3} + \frac{25}{12} = 16\frac{2}{3} + 2\frac{1}{12} = 18\frac{9}{12} = 18\frac{3}{4}分後$$

A. 18分45秒後

⑦ (1) $17+1=18$
1回

$18 \div 2 = 9$
2回

$9+1=10$
3回

$10 \div 2 = 5$
4回

$5+1=6$
5回

$6 \div 2 = 3$
6回

$3+1=4$
7回

$4 \div 2 = 2$
8回

$2 \div 2 = 1$
9回

A. 9回

[illegible]

(3) (2)で①を2回つか、1、2、3、4、5を除く

A. 96


$14 \div 2 = 7$ $7 - 1 = 6$ $6 \div 2 = 3$ $3 - 1 = 2$

$$\downarrow$$

$$15 - 1 = 14 \rightarrow X$$

32 32 $\xrightarrow{2\times}$ 64 $\xrightarrow{2\times}$ 128 $\xrightarrow{2\times}$ ~~256~~ — ①色使用在1.

④
817
127


 $127 - 1 = 128$
 $128 \div 2 \div 2 \div 2 \div 2 \div 2 \div 2 \div 2 = 1$

$$126 \div 2 = 63 \quad 63 - 1 = 62 \quad 62 \div 2 = 31 \quad \times$$

↓
 $124 \div 2 \div 2 = 31$ $31 - 1 = 30$ $30 \div 2 = 15$ X ①번 21과