

中学入試用計算問題集(第1回)

試験時間 7分

()月()日()曜日

$$\boxed{1} \quad \{ 1 - \times (\frac{1}{4} \div 9) \} \div (\frac{2}{3} - \frac{5}{8}) = 2 \quad 2 \quad = (\quad)$$

$$\boxed{2} \quad 2 \frac{5}{14} \div \{ 2 \frac{1}{4} \times (2 \frac{3}{7} - 1 \frac{2}{9}) - 1 \frac{2}{3} \frac{7}{5} \} = (\quad)$$

$$\boxed{3} \quad [28 - \{ 14 + 75 \div 25 - (7 \times 2 - 4) \} \div 7] \div 9 = (\quad)$$

中学入試用計算問題集(第2回)

試験時間 7分

()月()日()曜日

① $\frac{5}{6} - 0.25 \times \frac{2}{3} \div \frac{5}{12} = (\quad)$

② $20000 \times 15000 \div 1000 \times 0.003 = (\quad)$

③ $(0.25 + \frac{1}{3}) \times \frac{6}{7} + (1\frac{5}{6} - 0.5) \div 1\frac{1}{3} = (\quad)$

中学入試用計算問題集(第3回)

試験時間 7分

()月()日()曜日

① $(2\frac{2}{3} \times 5\frac{3}{4} - 1\frac{5}{6} \times 7\frac{6}{11}) \times 2\frac{2}{3} = (\quad)$

② $2\frac{1}{3} \times 0.25 + \frac{2}{7} \div (1.4 - \frac{5}{7}) = (\quad)$

③ $(\frac{1}{3} + \frac{1}{15} + \frac{1}{35}) \times 7 = (\quad)$

中学入試用計算問題集(第4回)

試験時間 7分

()月()日()曜日

① 1日 - 3時42分50秒 \times 4 = ()時()分()秒

② $(17 \times 13 - 11) \div (6 \times 48 \div 16 - 6 \div 2) \times 7 = ()$

③ $(1\frac{5}{6} \div 5\frac{1}{2} - \frac{1}{2} \times \frac{1}{3}) \div 1\frac{1}{3} + 1\frac{3}{4} \div = 1 = ()$

中学入試用計算問題集(第5回)

試験時間 7分

()月()日()曜日

① $9\frac{7}{12} - (4 \div \frac{8}{3} + 7.8) \times \frac{1}{3} = (\quad)$

② $(3\frac{5}{6} - \quad + 1\frac{7}{15}) \div 1\frac{4}{15} = 1.5 = (\quad)$

③ $\{(21 + 3) \times \frac{2}{3} - 1\frac{3}{5}\} \div 9 = (\quad)$

中学入試用計算問題集(第6回)

試験時間 7分

()月()日()曜日

① $(2\frac{1}{2} \times \frac{11}{15} - 0.25 \times \frac{1}{4}) \times 1.8 = (\quad)$

② $\{2\frac{1}{7} \times (1\frac{1}{3} - \frac{3}{4}) - \frac{1}{4}\} \div \{11 \div (2\frac{1}{8} - \frac{3}{4}) \times \frac{1}{4}\} = (\quad)$

③ $\{18 - 7 \times 2 \times (4 - 3\frac{6}{7})\} \times 2 - 63 \times 3 \times (15 - 14\frac{8}{9}) = (\quad)$

中学入試用計算問題集(第1回) 解答と解き方

【解答】

① 3

② $2\frac{1}{2}$ (2.5)

③ 3

【解き方】

① $\frac{2}{3} - \frac{5}{8} = \frac{16}{24} - \frac{15}{24} = \frac{1}{24}$

$22 \times \frac{1}{24} = \frac{22 \times 1}{24} = \frac{11}{12}$ これが, { } の中。

$1 - \boxed{x \times (\frac{1}{4} \div 9)} = \frac{11}{12}$ となるから, $1 - \frac{11}{12} = \frac{1}{12}$ が, \square の中。

$\frac{1}{4} \div 9 = \frac{1}{4 \times 9} = \frac{1}{36}$ だから, $x \times \frac{1}{36} = \frac{1}{12}$ となる。

$x = \frac{1}{12} \div \frac{1}{36} = \frac{1 \times 36}{12 \times 1} = 3$

② () の中... $2\frac{3}{7} - 1\frac{2}{9} = 2\frac{27}{63} - 1\frac{14}{63} = 1\frac{13}{63} = \frac{76}{63}$

$2\frac{1}{4} \times \frac{76}{63} = \frac{9}{4} \times \frac{76}{63} = \frac{9 \times 76}{4 \times 63} = \frac{19}{7}$

$\frac{19}{7} - 1\frac{27}{35} = \frac{95}{35} - \frac{62}{35} = \frac{33}{35}$ これが, { } の中。

$2\frac{5}{14} \div \frac{33}{35} = \frac{33}{14} \div \frac{33}{35} = \frac{33 \times 35}{14 \times 33} = \frac{5}{2} = 2\frac{1}{2}$

③ $[28 - \{14 + 7.5 \div 2.5 - (7 \times 2 - 4)\}] \div 7 \div 9$
 $= [28 - \{14 + 3 - (14 - 4)\}] \div 7 \div 9$
 $= \{28 - (14 + 3 - 10)\} \div 7 \div 9$
 $= (28 - 7 \div 7) \div 9$
 $= (28 - 1) \div 9$
 $= 27 \div 9$
 $= 3$

中学入試用計算問題集(第2回) 解答と解き方

【解答】

① $\frac{13}{30}$

② 900

③ $1\frac{1}{2}$

【解き方】

$$\begin{aligned} \text{① } 0.25 \times \frac{2}{3} \div \frac{5}{12} &= \frac{1}{4} \times \frac{2}{3} \div \frac{5}{12} = \frac{1 \times 2 \times \cancel{12}^1}{4 \times 3 \times 5} = \frac{2}{5} \\ \frac{5}{6} - \frac{2}{5} &= \frac{25}{30} - \frac{12}{30} = \frac{13}{30} \end{aligned}$$

$$\begin{aligned} \text{② } 20000 \times 15000 \div 1000 \times 0.003 \\ &= 20000 \times 15000 \div 1000 \times \frac{3}{1000} \\ &= \frac{\cancel{20000}^{20} \times \cancel{15000}^{15}}{\cancel{1000}^1 \times \cancel{1000}^1} \times 3 = 900 \end{aligned}$$

$$\begin{aligned} \text{③ } (0.25 + \frac{1}{3}) \times \frac{6}{7} + (1\frac{5}{6} - 0.5) \div 1\frac{1}{3} \\ \text{ア} \dots 0.25 + \frac{1}{3} = \frac{1}{4} + \frac{1}{3} = \frac{3}{12} + \frac{4}{12} = \frac{7}{12} \\ \text{イ} \dots \frac{7}{12} \times \frac{6}{7} = \frac{\cancel{7} \times \cancel{6}^1}{\cancel{12} \times \cancel{7}^1} = \frac{1}{2} \\ \text{ウ} \dots 1\frac{5}{6} - 0.5 = 1\frac{5}{6} - \frac{1}{2} = 1\frac{5}{6} - \frac{3}{6} = 1\frac{2}{6} = 1\frac{1}{3} \\ \text{エ} \dots 1\frac{1}{3} \div 1\frac{1}{3} = 1 \\ \frac{1}{2} + 1 = 1\frac{1}{2} \end{aligned}$$

中学入試用計算問題集(第3回) 解答と解き方

【解答】

① 4

② 1

③ 3

【解き方】

$$\text{① } 2\frac{2}{3} \times 5\frac{3}{4} = \frac{8}{3} \times \frac{23}{4} = \frac{\overset{2}{\cancel{8}} \times 23}{3 \times \underset{1}{\cancel{4}}} = \frac{46}{3}$$

$$1\frac{5}{6} \times 7\frac{6}{11} = \frac{11}{6} \times \frac{83}{11} = \frac{\overset{1}{\cancel{11}} \times 83}{6 \times \underset{1}{\cancel{11}}} = \frac{83}{6}$$

$$\frac{46}{3} - \frac{83}{6} = \frac{92}{6} - \frac{83}{6} = \frac{9}{6} = \frac{3}{2}$$

$$\frac{3}{2} \times 2\frac{2}{3} = \frac{3}{2} \times \frac{8}{3} = \frac{\overset{1}{\cancel{3}} \times \overset{4}{\cancel{8}}}{\underset{1}{\cancel{2}} \times \underset{1}{\cancel{3}}} = 4$$

$$\text{② } 2\frac{1}{3} \times 0.25 = 2\frac{1}{3} \times \frac{1}{4} = \frac{7}{3} \times \frac{1}{4} = \frac{7 \times 1}{3 \times 4} = \frac{7}{12}$$

$$1.4 - \frac{5}{7} = 1\frac{4}{10} - \frac{5}{7} = 1\frac{2}{5} - \frac{5}{7} = 1\frac{14}{35} - \frac{25}{35} = \frac{49}{35} - \frac{25}{35} = \frac{24}{35}$$

$$\frac{2}{7} \div \frac{24}{35} = \frac{\overset{1}{\cancel{2}} \times \overset{5}{\cancel{35}}}{\underset{1}{\cancel{7}} \times \underset{12}{\cancel{24}}} = \frac{5}{12}$$

$$\frac{7}{12} + \frac{5}{12} = \frac{12}{12} = 1$$

$$\text{③ } \frac{1}{3} + \frac{1}{15} + \frac{1}{35} = \frac{35}{105} + \frac{7}{105} + \frac{3}{105} = \frac{45}{105} = \frac{3}{7}$$

$$\frac{3}{7} \times 7 = \frac{\overset{1}{\cancel{3}} \times \overset{7}{\cancel{7}}}{\underset{1}{\cancel{7}}} = 3$$

中学入試用計算問題集(第4回) 解答と解き方

【解答】

① 9, 8, 40

② 98

③ 2

【解き方】

① 3時42分50秒 × 4

= 12時16分8秒 × 4 200 ÷ 60 = 3 残り 20 だから,

= 12時17分20秒 171 ÷ 60 = 2 残り 51 だから,

= 14時51分20秒

1日 - 14時51分20秒

= 24時 - 14時51分20秒

= 23時6分 - 14時51分20秒

= 23時59分60秒 - 14時51分20秒

= 9時8分40秒

② $(17 \times 13 - 11) \div (6 \times 48 \div 16 - 6 \div 2) \times 7$

= $(221 - 11) \div (18 - 3) \times 7$

= $210 \div 15 \times 7$

= 14×7

= 98

③ $(1\frac{5}{6} \div 5\frac{1}{2} - \frac{1}{2} \times \frac{1}{3}) \div 1\frac{1}{3} + 1\frac{3}{4} \div$ = 1

$\frac{11}{6} \div \frac{11}{2} - \frac{1}{2} \times \frac{1}{3} = \frac{11}{6} \div \frac{11}{2} - \frac{1}{6}$

ア... $1\frac{5}{6} \div 5\frac{1}{2} = \frac{11}{6} \div \frac{11}{2} = \frac{11}{6} \times \frac{2}{11} = \frac{1}{3}$

イ... $\frac{1}{2} \times \frac{1}{3} = \frac{1 \times 1}{2 \times 3} = \frac{1}{6}$

ウ... $\frac{11}{6} - \frac{1}{6} = \frac{10}{6} = \frac{5}{3}$

エ... $\frac{5}{3} \div 1\frac{1}{3} = \frac{5}{3} \div \frac{4}{3} = \frac{5}{3} \times \frac{3}{4} = \frac{5}{4}$

オ... $1 - \frac{1}{8} = \frac{8}{8} - \frac{1}{8} = \frac{7}{8}$

$\frac{5}{4} \div \frac{7}{8} = \frac{5}{4} \times \frac{8}{7} = \frac{5 \times 2}{1 \times 7} = \frac{10}{7}$ だから, $1\frac{3}{4} \div \frac{7}{8} = \frac{7}{4} \div \frac{7}{8} = \frac{7}{4} \times \frac{8}{7} = \frac{7 \times 2}{4 \times 1} = 2$

中学入試用計算問題集(第5回) 解答と解き方

【解答】

$$\boxed{1} \quad 6\frac{29}{60} \qquad \boxed{2} \quad 2\frac{2}{5} \qquad \boxed{3} \quad 1\frac{3}{5}$$

【解き方】

$$\boxed{1} \quad 4 \div \frac{8}{3} = \frac{4 \times 3}{8} = \frac{3}{2} = 1\frac{1}{2}$$

$$1\frac{1}{2} + 7.8 = 1\frac{1}{2} + 7\frac{8}{10} = 1\frac{5}{10} + 7\frac{8}{10} = 8\frac{13}{10} = \frac{93}{10}$$

$$\frac{93}{10} \times \frac{1}{3} = \frac{93 \times 1}{10 \times 3} = \frac{31}{10} = 3\frac{1}{10}$$

$$9\frac{7}{12} - 3\frac{1}{10} = 9\frac{35}{60} - 3\frac{6}{60} = 6\frac{29}{60}$$

$$\boxed{2} \quad 1.5 \times 1\frac{14}{15} = 1\frac{1}{2} \times \frac{29}{15} = \frac{3}{2} \times \frac{29}{15} = \frac{3 \times 29}{2 \times 5} = \frac{29}{10}$$

$$\frac{29}{10} - 1\frac{7}{15} = \frac{29}{10} - \frac{22}{15} = \frac{87}{30} - \frac{44}{30} = \frac{43}{30}$$

$$3\frac{5}{6} - \frac{43}{30} = 3\frac{25}{30} - 1\frac{13}{30} = 2\frac{12}{30} = 2\frac{2}{5}$$

$$\boxed{3} \quad 21 + 3 = 24$$

$$24 \times \frac{2}{3} = \frac{24 \times 2}{3} = 16$$

$$16 - 1\frac{3}{5} = 15\frac{5}{5} - 1\frac{3}{5} = 14\frac{2}{5}$$

$$14\frac{2}{5} \div 9 = \frac{72}{5} \div 9 = \frac{72}{5 \times 9} = \frac{8}{5} = 1\frac{3}{5}$$

中学入試用計算問題集(第6回) 解答と解き方

【解答】

① $3\frac{3}{16}$ ② $\frac{1}{2}$ ③ 11

【解き方】

① $2\frac{1}{2} \times \frac{11}{15} = \frac{5}{2} \times \frac{11}{15} = \frac{\overset{1}{\cancel{5}} \times 11}{2 \times \cancel{3} \times 3} = \frac{11}{6}$

$$0.25 \times \frac{1}{4} = \frac{1}{4} \times \frac{1}{4} = \frac{1 \times 1}{4 \times 4} = \frac{1}{16}$$

$$\frac{11}{6} - \frac{1}{16} = \frac{88}{48} - \frac{3}{48} = \frac{85}{48}$$

$$\frac{85}{48} \times 1.8 = \frac{85}{48} \times 1\frac{8}{10} = \frac{85}{48} \times 1\frac{4}{5} = \frac{85}{48} \times \frac{9}{5} = \frac{\overset{17}{\cancel{85}} \times \overset{3}{\cancel{9}}}{\underset{16}{\cancel{48}} \times \underset{1}{\cancel{5}}} = \frac{51}{16} = 3\frac{3}{16}$$

② $\left\{ 2\frac{1}{7} \times \left(1\frac{1}{3} - \frac{3}{4} \right) - \frac{1}{4} \right\} \div \left\{ 11 \div \left(2\frac{1}{8} - \frac{3}{4} \right) \times \frac{1}{4} \right\} = (\quad)$

$$1\frac{1}{3} - \frac{3}{4} = 1\frac{4}{12} - \frac{9}{12} = \frac{16}{12} - \frac{9}{12} = \frac{7}{12}$$

$$2\frac{1}{7} \times \frac{7}{12} = \frac{15}{7} \times \frac{7}{12} = \frac{\overset{5}{\cancel{15}} \times \overset{1}{\cancel{7}}}{\underset{1}{7} \times \underset{4}{\cancel{12}}} = \frac{5}{4}$$

$$\frac{5}{4} - \frac{1}{4} = \frac{4}{4} = 1 \quad \dots \text{ア}$$

$$2\frac{1}{8} - \frac{3}{4} = 2\frac{1}{8} - \frac{6}{8} = 1\frac{9}{8} - \frac{6}{8} = 1\frac{3}{8}$$

$$11 \div 1\frac{3}{8} \times \frac{1}{4} = 11 \div \frac{11}{8} \times \frac{1}{4} = \frac{\overset{1}{\cancel{11}} \times \overset{2}{\cancel{8}} \times 1}{\underset{1}{\cancel{11}} \times \underset{1}{\cancel{4}}} = 2 \quad \dots \text{イ}$$

$$1 \div 2 = \frac{1}{2}$$

③ $7 \times 2 \times \left(4 - 3\frac{6}{7} \right) = 7 \times 2 \times \left(3\frac{7}{7} - 3\frac{6}{7} \right) = 7 \times 2 \times \frac{1}{7} = \frac{\overset{1}{\cancel{7}} \times 2 \times 1}{\cancel{7}_1} = 2$

$$(18 - 2) \times 2 = 16 \times 2 = 32$$

$$63 \times 3 \times \left(15 - 14\frac{8}{9} \right) = 63 \times 3 \times \frac{1}{9} = \frac{\overset{7}{\cancel{63}} \times 3 \times 1}{\underset{1}{\cancel{9}}} = 21$$

$$32 - 21 = 11$$