

2008 浦和明の星女子中学校

1. (1) $2 \times \left\{ 3 - \frac{3}{10} \div \left(\frac{4}{5} - \frac{2}{3} \right) \right\} \div 3$ を計算しなさい。

2008 江戸川女子中学校

1. (1) $9999 \times 9999 = 9999 \times 10000 - 9999 \times \square$

(2) $\left(\frac{7}{16} - \frac{1}{8} \right) \times \frac{4}{25} + \frac{2}{7} \div \frac{1}{3} \div \frac{4}{5} = \square$

(3) $5 \text{ km} - 200 \text{ m} + 21600 \text{ cm} - 1.64 \text{ km} = \square \text{ m}$

2008 桜蔭中学校

1. (1) $\left(2\frac{11}{24} - 0.675 \right) \div \frac{4}{27} - 7\frac{13}{16} = \square$

(2) $1\frac{2}{3} \div 5.5 + 1\frac{7}{12} \div (2.25 - \square) = 1\frac{1}{6}$

2008 大妻中学校

1. (1) $4\frac{1}{3} + \left\{ \left(2 - 1\frac{2}{3} \right) \div \frac{2}{7} + \frac{1}{4} \right\} \times 4 = \square$

(2) $(2+3) \times 4 \div \{ \square - (4-3) \} = 2$

(3) $5 \text{ 時間} 24 \text{ 分} \times 240 = \square \text{ 日}$

2008 大妻多摩中学校

1. (1) $\left(2\frac{1}{3} + 3\frac{1}{4} - 1.75 \right) \div 3\frac{2}{7} = \square$

(2) $(1234 + 2341 + 3412 + 4123) \div 110 = \square$

(3) $\left(\square - 1 \right) \div 1\frac{1}{4} + \frac{3}{5} = 1\frac{1}{2}$

2008 大妻中野中学校

1. (1) $2008 \div 8 - 20 \times 12.5 = \square$

(2) $45 - 36 \div (15 - 6) + 3 - 2 \times 4 = \square$

(3) $1\frac{1}{5} \div \left(1 - \frac{1}{7} \right) \times 1\frac{1}{7} \div \left(1 - \frac{1}{9} \right) \times 1\frac{1}{9} = \square$

(4) $1985 \times 3.14 + 15 \times 3.14 = \square$

(5) $\left(\square - \frac{3}{2} \right) \div 3 + \frac{3}{4} = 1$

2008 大妻嵐山中学校

1. (1) $(156 \div 3 - 2) \times (78 - 69)$

(2) $0.28 \times 5 + 3.6 - 1.2 \div 0.3$

(3) $172.2 \div 24.6 + (42 - 17) \times 4$

(4) $3.14 \times 23 + 3.14 \times 17$

(5) $2.25 \times 46 - 0.225 \times 260 + 22.5 \times 8$

(6) $\frac{5}{6} \times 2.4 - \frac{3}{7} \times 3.5$

(7) $3\frac{1}{2} - \frac{2}{3} \times 1\frac{11}{16} \div \frac{9}{4}$

(8) $\left(7\frac{3}{7} - 4\frac{1}{3} \right) \div \frac{13}{42} \div 2$

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$$\begin{aligned} 1(1) \quad & 2 \times \left\{ 3 - \frac{3}{10} \div \left(\frac{4}{5} - \frac{2}{3} \right) \right\} \div 3 \\ &= 2 \times \left(3 - \frac{3}{10} \times \frac{15}{2} \right) \times \frac{1}{3} \\ &= \cancel{2} \times \frac{\cancel{15}^2}{\cancel{2}^1} \times \frac{1}{\cancel{3}^1} = \underline{\underline{\frac{1}{2}}} \end{aligned}$$

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$$\begin{aligned} 1(1) \quad & 9999 \times 9999 = 9999 \times (10000 - 1) \\ &= 9999 \times 10000 - 9999 \times \underline{\underline{1}} \end{aligned}$$

$$\begin{aligned} (2) \quad & \left(\frac{7}{16} - \frac{1}{8} \right) \times \frac{4}{25} + \frac{2}{7} \div \frac{1}{3} \div \frac{4}{5} \\ &= \frac{\cancel{15}^1}{\cancel{16}^4} \times \frac{\cancel{4}^1}{\cancel{25}^5} + \frac{\cancel{2}^1}{7} \times \frac{3}{1} \times \frac{5}{\cancel{4}^2} \\ &= \frac{1}{20} + \frac{15}{14} = \frac{7}{140} + \frac{150}{140} = \frac{157}{140} = \underline{\underline{1 \frac{17}{140}}} \end{aligned}$$

$$(3) \quad 5\text{km} - 200\text{m} + 21600\text{cm} - 1.64\text{km}$$

$$= 5000\text{m} - 200\text{m} + 216\text{m} - 1640\text{m}$$

$$= 5016\text{m} - 1640\text{m}$$

$$= \underline{\underline{3376\text{m}}}$$

$$\begin{array}{r} 5016 \\ - 1640 \\ \hline 3376 \end{array}$$

2008 桜蔭中学

$$0.675 = \frac{27}{40}$$

$$1. (1) ① \left(2\frac{11}{24} - 0.675\right) \div \frac{4}{27} - 7\frac{13}{16}$$

$$= \left(2\frac{11}{24} - \frac{27}{40}\right) \times \frac{27}{4} - 7\frac{13}{16}$$

$$= \left(\frac{295}{120} - \frac{81}{120}\right) \times \frac{27}{4} - 7\frac{13}{16}$$

$$= \frac{214}{120} \times \frac{27}{4} - 7\frac{13}{16}$$

$$= \frac{963}{80} - \frac{125 \times 5}{16 \times 5}$$

$$= \frac{963}{80} - \frac{625}{80} = \frac{338}{80} = \frac{169}{40} = 4\frac{9}{40}$$

$$\begin{array}{r} 48 \\ + 11 \\ \hline 59 \\ \times 5 \\ \hline 295 \end{array}$$

$$\begin{array}{r} 16 \\ \times 7 \\ \hline 112 \\ + 13 \\ \hline 125 \end{array}$$

$$\begin{array}{r} 295 \\ - 81 \\ \hline 214 \end{array}$$

$$② \frac{1}{3} \div 5.5 + 1\frac{7}{12} \div (2.25 - \square) = 1\frac{1}{6}$$

$$\frac{1}{3} \times \frac{10}{55} = \frac{10}{33} \quad ② \quad ①$$

$$② = 1\frac{1}{6} - \frac{10}{33} = 1\frac{11}{66} - \frac{20}{66} = \frac{57}{66} = \frac{19}{22}$$

$$① = 1\frac{7}{12} \div \frac{19}{22} = \frac{19}{12} \times \frac{22}{19} = \frac{11}{6}$$

$$\begin{aligned} \square &= 2.25 - \frac{11}{6} \\ &= \frac{9}{4} - \frac{11}{6} \\ &= \frac{27}{12} - \frac{22}{12} = \frac{5}{12} \end{aligned}$$

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$$\begin{aligned} 1. (1) & 4\frac{1}{3} + \left\{ (2 - \frac{1}{3}) \div \frac{2}{7} + \frac{1}{4} \right\} \times 4 \\ & = 4\frac{1}{3} + \left(\frac{1}{3} \times \frac{7}{2} + \frac{1}{4} \right) \times 4 \\ & = 4\frac{1}{3} + \left(\frac{14}{12} + \frac{3}{12} \right) \times 4 \\ & = 4\frac{1}{3} + \frac{17}{3} \times 1 = 4\frac{1}{3} + 5\frac{2}{3} = \underline{\underline{10}} \end{aligned}$$

$$(2) \underbrace{(2+3)}_{\substack{5 \\ 20}} \times 4 \div \{ \square - \underbrace{(4-3)}_{1} \} = 2$$

$$\{ \quad \quad \} = 20 \div 2 = 10 \quad \square = 1 + 10 = \underline{\underline{11}}$$

$$(3) 5 \text{時間} 24 \text{分} \times 240$$

$$= 5 \frac{24^2}{60} \times 240 = \frac{27}{5} \times \frac{48}{1} = 1296 (\text{時間})$$

$$1296 \div 24 = 54$$

A. 54 (回)

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$$\begin{aligned} 1. (1) & (2\frac{1}{3} + 3\frac{1}{4} - 1.75) \div 3\frac{2}{7} \\ & = \left(\frac{28}{12} + \frac{39}{12} - \frac{21}{12} \right) \times \frac{7}{23} = \frac{46}{12} \times \frac{7}{23} = \frac{1}{6} = \underline{\underline{1\frac{1}{6}}} \end{aligned}$$

$$\begin{aligned} (2) & (1234 + 2341 + 3412 + 4123) \div 110 \\ & \quad \quad \quad 1+2+3+4=10 \\ & = (10000 + 1000 + 100 + 10) \div 110 = \frac{11110}{110} = \underline{\underline{101}} \end{aligned}$$

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

$$\square = \left(\frac{1}{2} - \frac{3}{5} \right) \times \frac{1}{4} + 1$$

$$= \left(\frac{15}{10} - \frac{6}{10} \right) \times \frac{5}{4} + 1$$

$$= \frac{9}{2} \times \frac{5}{4} + 1 = \underline{\underline{2\frac{1}{8}}}$$

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$$1^{(1)} \quad 2008 \div 8 - 20 \times 12.5 \\ = 251 - 250 = \underline{\underline{1}}$$

$$(2) \quad 45 - 36 \div (15 - 6) + 3 - 2 \times 4 \\ = 45 - 36 \div 9 + 3 - 8 \\ = 45 - 4 + 3 - 8 = \underline{\underline{36}}$$

$$(3) \quad \frac{1}{5} \div \left(1 - \frac{1}{7}\right) \times \frac{1}{7} \div \left(1 - \frac{1}{9}\right) \times \frac{1}{9} \\ = \frac{\cancel{1}^1}{5} \times \frac{\cancel{7}^1}{\cancel{6}_1} \times \frac{\cancel{8}^1}{\cancel{7}_1} \times \frac{\cancel{9}^1}{\cancel{8}_1} \times \frac{10}{9} = \underline{\underline{2}}$$

$$(4) \quad 1985 \times 3.14 + 15 \times 3.14 = 3.14 \times (1985 + 15) = 3.14 \times \underset{2000}{\underline{\underline{2000}}} = \underline{\underline{6280}}$$

$$(5) \quad \left(\square - \frac{3}{2}\right) \div 3 + \frac{3}{4} = 1$$

① ②

$$\textcircled{2} = 1 - \frac{3}{4} = \frac{1}{4} \quad \textcircled{1} = \frac{1}{4} \times 3 = \frac{3}{4}$$

$$\square = \frac{3}{4} + \frac{3}{2} = \frac{9}{4} = \underline{\underline{2\frac{1}{4}}}$$

2008 大妻 嵐山 中学

$$(1) \quad (156 \div 3 - 2) \times (78 - 69) = \underline{\underline{450}}$$

$$(2) \quad 0.28 \times 5 + 3.6 - 1.2 \div 0.3 = \underline{\underline{1}}$$

$$(3) \quad 172.2 \div 24.6 + (42 - 17) \times 4 = \underline{\underline{107}}$$

$$\begin{array}{r} 7 \\ 24.6 \overline{) 172.2} \\ \underline{172.2} \\ 0 \end{array}$$

$$(4) \quad 3.14 \times 23 + 3.14 \times 17$$

$$= 3.14 \times (23 + 17) = 3.14 \times 40 = \underline{\underline{125.6}}$$

$$(5) \quad 2.25 \times 46 - 0.225 \times 260 + 22.5 \times 8$$

$$= 225 \times 0.01 \times 46 - 225 \times 0.001 \times 260 + 225 \times 0.1 \times 8$$

$$= 225 \times (0.46 - 0.26 + 0.8) = \underline{\underline{225}}$$

$$(6) \quad \frac{5}{6} \times 2.4 - \frac{3}{7} \times 3.5 = \frac{1}{2} \times \frac{12}{8} - \frac{3}{7} \times \frac{7}{2} = \underline{\underline{\frac{1}{2}}} \quad (0.5)$$

$$(7) \quad 3\frac{1}{2} - \frac{2}{3} \times 1\frac{11}{16} \div \frac{9}{4} = 3\frac{1}{2} - \frac{2}{3} \times \frac{27}{16} \times \frac{4}{9} = \underline{\underline{3}}$$

$$(8) \quad (7\frac{3}{7} - 4\frac{1}{3}) \div \frac{13}{42} \div 2$$

$$= (7\frac{9}{21} - 4\frac{7}{21}) \times \frac{42}{13} \times \frac{1}{2}$$

$$= 3\frac{2}{21} \times \frac{21}{13}$$

$$= \frac{65}{21} \times \frac{21}{13} = \underline{\underline{5}}$$