

2008 東洋英和女学院中学部

1. (1) $7 \times 5 - 238 \div 17$
 (2) $1\frac{1}{4} \times \left(\frac{5}{6} - \frac{4}{9}\right) \div \frac{7}{12} + \frac{1}{2}$
 (3) $\frac{1}{2} + \left(0.8 + \frac{1}{4}\right) \times \left(2 - 1\frac{5}{7}\right) - \left\{\left(\frac{3}{5} + 0.3\right) \div 1\frac{1}{2} - \frac{1}{5}\right\}$

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1. (1) $28 - 18 \div 2 \times 3 = \boxed{}$
 (2) $300 - 280 \div (53 - 18) = \boxed{}$
 (3) $2\frac{1}{3} \times \left(4 - \frac{1}{7}\right) - \frac{1}{9} = \boxed{}$
 (4) $3.14 \times 4.8 + 3.14 \times 6.4 - 3.14 \times 1.2 = \boxed{}$
 (5) $43 - (\boxed{} + 2) \times 5 = 3$

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1. (1) $1\frac{1}{6} - \left(0.5 - \frac{1}{3}\right) \times \frac{6}{7} \div 3\frac{3}{7}$

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1. (1) $\frac{1}{81} + \frac{1}{108} + \frac{1}{162} = \boxed{}$
 (2) $3.72 \times 19.6 + 62.8 \times 5.47 + 35.1 \times 3.72 = \boxed{}$
 (3) $(1 - 0.2) \div 0.2 - \left\{\frac{3}{4} \div \frac{5}{8} - \frac{1}{2} \times \left(1 - \frac{4}{5}\right)\right\} = \boxed{}$
 (4) $(7 + 77 + 777) \div (7 + 7 \times 7 + \boxed{}) = 7$
 (5) $84000\text{cm}^3 + \boxed{}\text{d}\ell - 21\ell = 0.08\text{m}^3$

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1. (1) $9 + 45 \div 3 \times 5 = \boxed{}$
 (2) $\frac{1}{2} \times \frac{1}{7} - \frac{1}{7} \times \frac{1}{4} + \frac{1}{12} \times \frac{1}{7} = \boxed{}$
 (3) $\frac{3}{8} - \left(\frac{1}{3} + \frac{1}{4}\right) \div 4\frac{2}{3} = \boxed{}$

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1. (1) $2\frac{2}{5} \times \left(2\frac{7}{10} - \frac{1}{4}\right) \div 1\frac{17}{25}$

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1. (1) $24 \div 6 \times 7 - 3 \times 2 \div \frac{1}{3} = \boxed{}$
 (2) $\left(3\frac{1}{2} - 2\frac{2}{3}\right) \times \boxed{} \div 2 + 8 = 13$

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$$1 \text{ (1) } 7 \times 5 - 238 \div 17$$

$$= 35 - 14 = \underline{\underline{21}}$$

$$\begin{array}{r} 14 \\ 17 \overline{) 238} \\ \underline{17} \\ 68 \\ \underline{68} \\ 0 \end{array}$$

$$(2) \quad 1\frac{1}{4} \times \left(\frac{5}{6} - \frac{4}{9}\right) \div \frac{7}{12} + \frac{1}{2}$$

$$= \frac{5}{\cancel{4}_2} \times \frac{\cancel{4}^1}{\cancel{6}_3} \times \frac{\cancel{12}^2}{\cancel{8}_1} + \frac{1}{2}$$

$$= \frac{5}{6} + \frac{3}{6} = \frac{8}{6} = \frac{4}{3} = \underline{\underline{1\frac{1}{3}}}$$

$$(3) \quad \frac{1}{2} + \left(0.8 + \frac{1}{4}\right) \times \left(2 - 1\frac{5}{7}\right) - \left\{\left(\frac{3}{5} + 0.3\right) \div 1\frac{1}{2} - \frac{1}{5}\right\}$$

$$= \frac{1}{2} + \frac{\overset{(\frac{4}{5})}{3\cancel{2}}}{\cancel{20}_{10}} \times \frac{\cancel{2}^1}{\cancel{8}_1} - \left(\frac{\cancel{4}^1}{\cancel{10}_5} \times \frac{\cancel{2}^1}{\cancel{3}_1} - \frac{1}{5}\right)$$

$$= \frac{1}{2} + \frac{3}{10} - \frac{2}{5} = \frac{5}{10} + \frac{3}{10} - \frac{4}{10} = \frac{4}{10} = \underline{\underline{\frac{2}{5}}}$$

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$$1. (1) \quad 28 - \underbrace{18 \div 2}_{9} \times \underbrace{3}_{27} = \underline{\underline{1}}$$

$$(2) \quad 300 - 280 \div \underbrace{(53 - 18)}_{35} = 300 - \frac{280}{35} = 300 - \frac{40 \times 7}{5} = \underline{\underline{292}}$$

$$(3) \quad 2\frac{1}{3} \times (4 - \frac{1}{7}) - \frac{1}{9} \\ = \frac{4}{3} \times \frac{27}{7} - \frac{1}{9} = 8\frac{8}{9}$$

$$(4) \quad \underbrace{3.14} \times 4.8 + \underbrace{3.14} \times 6.4 - \underbrace{3.14} \times 1.2 \\ = \underbrace{3.14} \times \underbrace{(4.8 + 6.4 - 1.2)}_{10} = \underline{\underline{31.4}}$$

$$(5) \quad 43 - \underbrace{(\square + 2)}_{\textcircled{1}} \times \underbrace{5}_{\textcircled{2}} = 3.$$

$$\textcircled{2} = 43 - 3 = 40$$

$$\textcircled{1} = 40 \div 5 = 8$$

$$\square = 8 - 2 = \underline{\underline{6}}$$

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$$1. (1) \quad \frac{1}{6} - \underbrace{(0.5 - \frac{1}{3})}_{(\frac{1}{2})} \times \frac{6}{7} \div 3\frac{3}{7} \\ = \frac{1}{6} - \frac{1}{6} \times \frac{6}{7} \times \frac{7}{24} \\ = \frac{4}{24} - \frac{1}{24} = \frac{3}{24} = \underline{\underline{\frac{1}{8}}}$$

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$$\begin{aligned} 1. \quad (i) \quad & \frac{1}{81} + \frac{1}{108} + \frac{1}{162} \\ &= \frac{4}{81 \times 4} + \frac{3}{108 \times 3} + \frac{2}{162 \times 2} \\ &= \frac{9}{324} = \frac{1}{36} \end{aligned}$$

$$\begin{array}{r} 9 \overline{) 81, 108, 162} \\ 3 \overline{) 9, 12, 18} \\ 2 \overline{) 3, 4, 6} \\ 3 \overline{) 3, 2, 3} \\ 1, 2, 1 \end{array}$$

$$9 \times 3 \times 2 \times 3 \times 1 \times 2 \times 1 = 324$$

(2) 3.12×19.6 + 62.8×5.49 + 35.1×3.12

$$= 3.72 \times (19.6 + 35.1) + 62.8 \times 5.47$$

$$= 5.49 \times (3.72 \times 10 + 62.8) = \underline{\underline{549}}$$

$$(3) \left(\frac{1-0.2}{0.8} \right) \div 0.2 = \left\{ \frac{3}{4} \div \frac{5}{8} - \frac{1}{2} \times \left(1 - \frac{4}{5} \right) \right\}$$

$$= 4 - \left\{ \frac{3}{4} \times \frac{2^2}{5} - \frac{1}{2} \times \frac{1}{5} \right\}$$

$$= 4 - \left(\frac{6}{5} - \frac{1}{10}\right) = 4 - \frac{1}{10} = \underline{\underline{2\frac{9}{10}}} \quad (2.9)$$

(4) $(7+77+777) \div (7+7 \times 7 + \boxed{}) = 7$

() = (7 + 77 + 777) ÷ 7 = 1 + 11 + 111 = 123

$$1\square = 123 - (7 + 7 \times 7) = 123 - 56 = \underline{\underline{67}}$$

$$(5) \quad 84000 \text{ cm}^3 + \boxed{} \text{ dl} - 21 \text{ l} = 0.08 \text{ m}^3$$

$$840 \text{ dl} + 1 \square \text{ dl} - 210 \text{ dl} = 800 \text{ dl}$$

$$\square = 800 + 210 - 840$$

= 170

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$$1^{(1)} \quad 9 + 45 \div 3 \times 5 = 9 + \frac{45 \times 5}{3} = 9 + 75 = \underline{\underline{84}}$$

$$\begin{aligned} (2) \quad & \frac{1}{2} \times \frac{1}{7} - \frac{1}{7} \times \frac{1}{4} + \frac{1}{12} \times \frac{1}{7} \\ &= \frac{1}{7} \times \left(\frac{1}{2} - \frac{1}{4} + \frac{1}{12} \right) = \frac{1}{7} \times \left(\frac{6}{12} - \frac{3}{12} + \frac{1}{12} \right) = \frac{1}{7} \times \frac{4}{12} = \underline{\underline{\frac{1}{21}}} \end{aligned}$$

$$(3) \quad \frac{3}{8} - \left(\frac{1}{3} + \frac{1}{4} \right) \div \frac{2}{3} = \frac{3}{8} - \frac{7}{12} \times \frac{3}{2} = \frac{3}{8} - \frac{7}{4} = \underline{\underline{-\frac{1}{4}}}$$

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$$\begin{aligned} 1^{(1)} \quad & 2\frac{2}{5} \times \left(2\frac{7}{10} - \frac{1}{4} \right) \div 1\frac{17}{25} \\ &= \frac{12}{5} \times \left(2\frac{14}{20} - \frac{5}{20} \right) \times \frac{25}{42} = \frac{12}{5} \times \frac{9}{4} \times \frac{25}{42} = 3\frac{1}{2} \\ & \quad \quad \quad 2\frac{9}{20} = \frac{49}{20} \end{aligned}$$

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$$\begin{aligned} 1^{(1)} \quad & 24 \div 6 \times 7 - 3 \times 2 \div \frac{1}{3} \\ &= \frac{4 \times 24 \times 7}{6} - 3 \times 2 \times 3 = 28 - 18 = \underline{\underline{10}} \end{aligned}$$

$$(2) \quad \left(3\frac{1}{2} - 2\frac{2}{3} \right) \times \square \div 2 + 8 = 13$$

$$2\frac{9}{6} - 2\frac{4}{6} = \frac{5}{6}$$

$$\frac{5}{6} \times \square \div 2 + 8 = 13$$

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

$$\textcircled{2} = 13 - 8 = 5$$

$$\textcircled{1} = 5 \times 2 = 10$$

$$\textcircled{1} = 10 \div \frac{5}{6} = \underline{\underline{12}}$$