

反射テスト 暗算 小数⇔分数 応用 四則演算 01

1. 次の計算をせよ。(S級1分, A級1分30秒, B級2分20秒, C級3分20秒)

(1) $1.5 + \frac{1}{3}$

(2) 0.125×0.5

(3) $1.25 - \frac{7}{12}$

(4) $2.5 \div 0.3$

(5) $0.5 \times 0.5 \times 0.5$

(6) $6 \div 0.75 \times 2 - 9\frac{2}{3}$

2. 次の計算をせよ。(S級1分10秒, A級1分45秒, B級2分40秒, C級4分)

(1) $1.2 + \frac{1}{3}$

(2) 0.5×0.375

(3) $1.7 - \frac{5}{6}$

(4) $2.25 \div 0.625$

(5) $1.5 \times 1.5 \times 1.5$

(6) $2 \div 0.75 \times 12 - 9\frac{1}{3}$

反射テスト 暗算 小数⇄分数 応用 四則演算 01 解答解説

1. 次の計算をせよ。(S級1分, A級1分30秒, B級2分20秒, C級3分20秒)

★計算は基本的に**分数**で行う.

★計算は**たてに書く**.

$$\begin{aligned}(1) \quad & 1.5 + \frac{1}{3} \\ &= 1\frac{1}{2} + \frac{1}{3} \\ &= 1\frac{3}{6} + \frac{2}{6} \\ &= 1\frac{5}{6}\end{aligned}$$

$$\begin{aligned}(2) \quad & 0.125 \times 0.5 \\ &= \frac{1}{8} \times \frac{1}{2} \\ &= \frac{1}{16} \\ &= 0.0625 \quad \cdots\text{別解}\end{aligned}$$

$$\begin{aligned}(3) \quad & 1.25 - \frac{7}{12} \\ &= 1\frac{1}{4} - \frac{7}{12} \\ &= 1\frac{3}{12} - \frac{7}{12} \\ &= \frac{15}{12} - \frac{7}{12} \\ &= \frac{8}{12} \\ &= \frac{2}{3}\end{aligned}$$

$$\begin{aligned}(4) \quad & 2.5 \div 0.3 \\ &= 2\frac{1}{2} \div \frac{3}{10} \\ &= \frac{5}{2} \times \frac{10}{3} \\ &= \frac{25}{3} \\ &= 8\frac{1}{3}\end{aligned}$$

$$\begin{aligned}(5) \quad & 0.5 \times 0.5 \times 0.5 \\ &= \frac{1}{2} \times \frac{1}{2} \times \frac{1}{2} \\ &= \frac{1}{8} \\ &= 0.125 \quad \cdots\text{別解}\end{aligned}$$

$$\begin{aligned}(6) \quad & 6 \div 0.75 \times 2 - 9\frac{2}{3} \\ &= 6 \div \frac{3}{4} \times 2 - 9\frac{2}{3} \\ &= 6 \times \frac{4}{3} \times 2 - 9\frac{2}{3} \\ &= 16 - 9\frac{2}{3} \\ &= 15\frac{3}{3} - 9\frac{2}{3} \\ &= 6\frac{1}{3}\end{aligned}$$

2. 次の計算をせよ。(S級1分10秒, A級1分45秒, B級2分40秒, C級4分)

$$\begin{aligned}(1) \quad & 1.2 + \frac{1}{3} \\ &= 1\frac{1}{5} + \frac{1}{3} \\ &= 1\frac{3}{15} + \frac{5}{15} \\ &= 1\frac{8}{15}\end{aligned}$$

$$\begin{aligned}(2) \quad & 0.5 \times 0.375 \\ &= \frac{1}{2} \times \frac{3}{8} \\ &= \frac{3}{16} \\ &= 0.1875 \quad \cdots\text{別解}\end{aligned}$$

$$\begin{aligned}(3) \quad & 1.7 - \frac{5}{6} \\ &= 1\frac{7}{10} - \frac{5}{6} \\ &= 1\frac{21}{30} - \frac{25}{30} \\ &= \frac{51}{30} - \frac{25}{30} \\ &= \frac{26}{30} \\ &= \frac{13}{15}\end{aligned}$$

$$\begin{aligned}(4) \quad & 2.25 \div 0.625 \\ &= 2\frac{1}{4} \div \frac{5}{8} \\ &= \frac{9}{4} \times \frac{8}{5} \\ &= \frac{18}{5} \\ &= 3\frac{3}{5} \\ &= 3.6 \quad \cdots\text{別解}\end{aligned}$$

$$\begin{aligned}(5) \quad & 1.5 \times 1.5 \times 1.5 \\ &= 1\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{1}{2} \\ &= \frac{3}{2} \times \frac{3}{2} \times \frac{3}{2} \\ &= \frac{27}{8} \\ &= 3\frac{3}{8} \\ &= 3.375 \quad \cdots\text{別解}\end{aligned}$$

$$\begin{aligned}(6) \quad & 2 \div 0.75 \times 12 - 9\frac{1}{3} \\ &= 2 \div \frac{3}{4} \times 12 - 9\frac{1}{3} \\ &= 2 \times \frac{4}{3} \times 12 - 9\frac{1}{3} \\ &= 32 - 9\frac{1}{3} \\ &= 31\frac{3}{3} - 9\frac{1}{3} \\ &= 22\frac{2}{3}\end{aligned}$$