基礎数学

演習問題1

問題 次の計算をせよ。答は、すべて分数で表せ。

(1)
$$0.24 \times 0.25 = \frac{0.24}{4} = 0.06 = \frac{3}{50}$$

(2)
$$\frac{29}{6} + \frac{13}{4} - \frac{19}{3} = \frac{58 + 39 - 76}{12} = \frac{21}{12} = \frac{7}{4}$$

(3)
$$2 + \frac{1}{2} - \frac{1}{3} + 0.4 = 2 + \frac{1}{2} - \frac{1}{3} + \frac{2}{5} = \frac{60 + 15 - 10 + 12}{30} = \frac{77}{30}$$

$$(4) \ \frac{3}{2} \times \left(-\frac{1}{2}\right) + \frac{7}{9} \div \frac{14}{3} = -\frac{3}{4} + \frac{7}{9} \times \frac{3}{14} = -\frac{3}{4} + \frac{1}{6} = -\frac{9-2}{12} = -\frac{7}{12}$$

(5)
$$\left(\frac{5}{6} - 0.75\right) \div 0.125 = \left(\frac{5}{6} - \frac{3}{4}\right) \div \frac{1}{8} = \frac{10 - 9}{12} \times 8 = \frac{2}{3}$$

(6)
$$1.75 \div \frac{7}{3} - \frac{1}{4} \times \frac{2}{3} = \frac{7}{4} \times \frac{3}{7} - \frac{1}{4} \times \frac{2}{3} = \frac{3}{4} - \frac{1}{6} = \frac{9-2}{12} = \frac{7}{12}$$

$$(7) \ \frac{2}{3} - \left\{ 8 \times \left(-\frac{3}{2} \right) \div (-6) \right\} + \left(\frac{1}{4} - 1 \right) = \frac{2}{3} - 2 - \frac{3}{4} = \frac{8 - 24 - 9}{12} = -\frac{25}{12}$$

$$(8) \ \frac{1}{3} \times \left(-2\frac{1}{7}\right) \div 0.5 - (-5) \div \left(-3\frac{1}{2}\right) \times \left(-4\frac{1}{2}\right) = -\frac{10}{7} + \frac{45}{7} = \frac{35}{7} = 5$$