

演習問題 1

問題 次の計算をせよ。

$$(1) 17 - (-3) - (-12 - 18) = 17 + 3 + 30 = 50$$

$$(2) 9 - (-7) + (-4) \times 3 - (-6) = 9 + 7 - 12 + 6 = 10$$

$$(3) (-2) + (-3) \times (-45) - (+90) = -2 + 135 - 90 = 43$$

$$(4) 8 + 5 - (-3) \times 2 + 6 \times (-4) = 13 + 6 - 24 = -5$$

$$(5) 6 - (-15) \div (-20) = 6 - \frac{3}{4} = \frac{21}{4} = 5\frac{1}{4}$$

$$(6) 4 + 6 \div (-2) - (+9) = 4 - 3 - 9 = -8$$

$$(7) (+20) \times \left(-\frac{1}{4}\right) + \left(-\frac{1}{9}\right) \times (-18) = -5 + 2 = -3$$

$$(8) 3\frac{2}{5} + \frac{3}{10} \times \left(-\frac{5}{6}\right) - 27 = \frac{2}{5} - \frac{1}{4} - 24 = \frac{3}{20} - 24 = -23\frac{17}{20} = -\frac{477}{20}$$

$$(9) \frac{6}{7} \div \frac{3}{14} - \left(-\frac{7}{8}\right) \times \left(-\frac{8}{9}\right) = 4 - \frac{7}{9} = 3\frac{2}{9} = \frac{29}{9}$$

$$(10) \left(-\frac{1}{2}\right) \times \frac{1}{3} \div \left(-\frac{1}{4}\right) \times 0 - \frac{1}{5} = -\frac{1}{5}$$

$$(11) \left(-\frac{1}{4}\right)^3 \div \left(-\frac{1}{8}\right)^2 + (-2)^3 \times \left(-\frac{3}{4}\right)^2 = -1 - \frac{9}{2} = -\frac{11}{2} = -5\frac{1}{2}$$

$$(12) (-5)^3 \div 25 \times (-5)^2 \div (-75) = \frac{5^5}{3 \cdot 5^4} = \frac{5}{3} = 1\frac{2}{3}$$

$$(13) (-15) \div (-5) - 100 \div (-5) + (-200) \div 8 = 3 + 20 - 25 = -2$$

$$(14) \{3 - (-5)\} \times \{(-2) \div (-7) - 1\} \div \{36 \div (-7)\} = 8 \times \frac{5}{7} \times \frac{7}{36} = \frac{10}{9} = 1\frac{1}{9}$$

$$(15) \left(-\frac{1}{2}\right) + \frac{1}{3} \times \left(-1\frac{1}{2}\right) - \frac{2}{3} \div \frac{5}{6} = -\frac{1}{2} - \frac{1}{2} - \frac{4}{5} = -1\frac{4}{5} = -\frac{9}{5}$$

$$(16) \frac{2}{3} - \left\{8 \times \left(-\frac{3}{2}\right) \div (-6)\right\} + \left(\frac{1}{4} - 1\right) = \frac{2}{3} - 2 + \frac{1}{4} - 1 = \frac{11}{12} - 3 = -2\frac{1}{12} = -\frac{25}{12}$$

$$(17) \{(-3)^2 + (-4)^2 - (-5)^2\} \div \left\{\left(-\frac{1}{2}\right) - \left(-\frac{1}{3}\right)^2\right\} = \{0\} \div \left\{\left(-\frac{1}{2}\right) - \left(-\frac{1}{3}\right)^2\right\} = 0$$

$$(18) (-17) + 9 \times \left(-\frac{2}{3}\right) + (-28) \div 1\frac{3}{4} - 35 \times \left(-2\frac{3}{5}\right) = -17 - 6 - 16 + 70 + 21 = 52$$

$$(19) \frac{1}{3} \times \left(-2\frac{1}{7}\right) \div 0.5 - (-5) \div \left(-3\frac{1}{2}\right) \times \left(-4\frac{1}{2}\right) = -\frac{10}{7} + 5 \cdot \frac{2}{7} \cdot \frac{9}{2} = \frac{35}{7} = 5$$

$$(20) 6.3 \div (-4.2) - \left(-\frac{5}{6}\right) \times \left(-\frac{4}{15}\right) + \left(-1\frac{7}{8}\right) \div 4\frac{1}{2} = -\frac{3}{2} - \frac{2}{9} - \frac{5}{12} = \frac{-54 - 8 - 15}{36} = -\frac{77}{36} = -2\frac{5}{36}$$