基礎ゼミナール
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) $6 - (-15) \div (-20) = 6 - \dfrac{3}{4} = \dfrac{21}{4} = 5\dfrac{1}{4}$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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