

正負の数 四則の混じった式の計算 1 解答編

I. 次の計算をせよ。

① 【岡山90】

$$(-9) \div (-3)$$

 $= 3$

② 【東京90】

$$\begin{aligned} 10 - 8 \times 2 \\ = 10 - 16 \\ = -6 \end{aligned}$$

③ 【埼玉90】

$$\begin{aligned} 2 \times (-4) + 3 \\ = -8 + 3 \\ = -5 \end{aligned}$$

④ 【千葉90】

$$\begin{aligned} 4 \times (-2) + 5 \\ = -8 + 5 \\ = -3 \end{aligned}$$

⑤ 【愛媛90】

$$\begin{aligned} (-24) \div (-6) \\ = 4 \end{aligned}$$

⑥ 【香川90】

$$\begin{aligned} 2 \times (-3) - 8 \\ = -6 - 8 \\ = -14 \end{aligned}$$

⑦ 【群馬90】

$$\begin{aligned} (-5) \times (-3) \\ = 15 \end{aligned}$$

⑧ 【静岡90】

$$\begin{aligned} 13 + (-2) \times 4 \\ = 13 + (-8) \\ = 13 - 8 \\ = 5 \end{aligned}$$

⑨ 【沖縄90】

$$3 \times (-2) = -6$$

⑩ 【秋田90】

$$\begin{aligned} 3 + 4 \times (-2) \\ = 3 - 8 \\ = -5 \end{aligned}$$

⑪ 【山梨90】

$$\begin{aligned} (-21) \div (-3) \\ = 7 \end{aligned}$$

⑫ 【福岡90】

$$\begin{aligned} 3 \times (-4) + 17 \\ = -12 + 17 \\ = 5 \end{aligned}$$

⑬ 【奈良90】

$$7 \times (-9) = -63$$

⑭ 【宮城90】

$$\begin{aligned} 10 + (-2) \times 3 \\ = 10 + (-6) \\ = 10 - 6 \\ = 4 \end{aligned}$$

⑮ 【熊本90】

$$\begin{aligned} 9 - 2 \times (-4) \\ = 9 + 8 \\ = 17 \end{aligned}$$

⑯ 【神奈川90】

$$\begin{aligned} 5 - 3 \times (7 - 9) \\ = 5 - 3 \times (-2) \\ = 5 + 6 \\ = 11 \end{aligned}$$

⑰ 【京都90】

$$\begin{aligned} -4^2 - 15 \div (4 - 7) \\ = -16 - 15 \div (-3) \\ = -16 + 5 \end{aligned}$$

$$= -11$$

⑱ 【佐賀90】

$$\begin{aligned} 5 \times (-3)^3 \\ = 5 \times (-27) \\ = -135 \end{aligned}$$

⑲ 【兵庫90】

$$\begin{aligned} 4 - (-3) \cdot -6 \times (-2) \\ = 4 - 9 + 12 \\ = 7 \end{aligned}$$

⑳ 【大阪90】

$$\begin{aligned} (-3) \times 5 - (-7) \\ = -15 + 7 \\ = -8 \end{aligned}$$

II. 次の計算をせよ。

① 【新潟90】

$$\begin{aligned} (-5) \times 2 + 3 \\ = -10 + 3 \\ = -7 \end{aligned}$$

② 【広島90】

$$\begin{aligned} 15 \div (-3) + 6 \\ = -5 + 6 \\ = 1 \end{aligned}$$

③ 【長崎90】

$$\begin{aligned} 12 - 6 \div 3 \\ = 12 - 2 \\ = 10 \end{aligned}$$

④ 【北海道90】

$$\begin{aligned} 3 \times (-6) + (-4) \cdot \\ = -18 + 16 \\ = -2 \end{aligned}$$

⑤ 【大分90】

$$\begin{aligned} 5 \times (-4) = -20 \\ ⑥ 【茨城90】 \end{aligned}$$

$$\begin{aligned} 2^2 \times 5 + (-3) \times 4 \\ = 4 \times 5 + (-12) \\ = 20 - 12 \\ = 8 \end{aligned}$$

⑦ 【石川90】

$$\begin{aligned} 7 + 3 \times (-5) \\ = 7 - 15 \\ = -8 \end{aligned}$$

⑧ 【福井90】

$$\begin{aligned} 6 - (13 - 9) \\ = 6 - 4 \\ = 2 \end{aligned}$$

⑨ 【高知90】

$$\begin{aligned} 5 + 9 \div (-3) \\ = 5 - 3 \\ = 2 \end{aligned}$$

⑩ 【鹿児島90】

$$\begin{aligned} 2 \times 7 + 18 \div 6 \\ = 14 + 3 \\ = 17 \end{aligned}$$

⑪ 【愛知90】

$$\begin{aligned} 7 - (-2) \times 3 \\ = 7 - (-6) \\ = 7 + 6 \\ = 13 \end{aligned}$$

⑫ 【岐阜90】

$$\begin{aligned} 3^2 + 5 \times (-2) \\ = 9 - 10 \\ = -1 \end{aligned}$$

⑬ 【沖縄90】

$$\begin{aligned} 8 - (-2) \cdot \\ = 8 - 4 \\ = 4 \end{aligned}$$

⑭ 【長野90】

$$\begin{aligned} 8 + 2 \times (-5) \\ = 8 - 10 \\ = -2 \end{aligned}$$

⑮ 【鳥取90】

$$\begin{aligned} \{8 - (29 - 31)\} \times 1.5 \\ = \{8 - (-2)\} \times 1.5 \\ = \{8 + 2\} \times 1.5 \\ = 10 \times 1.5 \\ = 15 \end{aligned}$$

⑯ 【富山90】

$$\begin{aligned} 2 \times 3 - 8 \\ = 6 - 8 \\ = -2 \end{aligned}$$

⑰ 【熊本89】

$$\begin{aligned} 8 + 3 \times (-5) \\ = 8 - 15 \\ = -7 \end{aligned}$$

⑱ 【熊本89】

$$\begin{aligned} 1 \div 0.2 = 5 \\ ⑲ 【神奈川89】 \end{aligned}$$

$$\begin{aligned} 2 - 3 \times (4 - 7) \\ = 2 - 3 \times (-3) \\ = 2 + 9 \\ = 11 \end{aligned}$$

⑳ 【東京89】

$$\begin{aligned} -8 - 4 \div 2 \\ = -8 - 2 \\ = -10 \end{aligned}$$

III. 次の計算をせよ。

① 【千葉89】

$$\begin{aligned} (-8) \div 2 + 9 \\ = -4 + 9 \\ = 5 \end{aligned}$$

② 【北海道89】

$$\begin{aligned} 2 \times 4 - (-3) \cdot \\ = 8 - 9 \\ = -1 \end{aligned}$$

③ 【京都89】

$$\begin{aligned} -5 \times 3 + (-2) \cdot \\ = -15 + 4 \\ = -11 \end{aligned}$$

④ 【滋賀89】

$$2^2 - 7 = 4 - 7 = -3$$

⑤ 【静岡89】

$$\begin{aligned} -4^2 \times (-3) \\ = -16 \times (-3) = 48 \end{aligned}$$

⑥ 【秋田89】

$$\begin{aligned} 4 - 18 \div 3 \\ = 4 - 6 \\ = -2 \end{aligned}$$

⑦ 【青森89】

$$\begin{aligned} (-5) \cdot -(-5) \\ = 25 + 5 \\ = 30 \end{aligned}$$

⑧ 【石川89】

$$\begin{aligned} (-3) \times (-2) - 8 \\ = 6 - 8 \\ = -2 \end{aligned}$$

⑨ 【佐賀89】

$$\begin{aligned} 5 - 2 \times (4 - 6) \\ = 5 - 2 \times (-2) \\ = 5 + 4 \\ = 9 \end{aligned}$$

⑩ 【香川89】

$$\begin{aligned} 12 \div (-3) + 16 \\ = -4 + 16 \\ = 12 \end{aligned}$$

⑪ 【宮城89】

$$\begin{aligned} 7 - 2 \times (-5) \\ = 7 + 10 \\ = 17 \end{aligned}$$

⑫ 【富山89】

$$\begin{aligned} 3 \times (4 - 7) \\ = 3 \times (-3) \\ = -9 \end{aligned}$$

⑬ 【岩手89】

$$\begin{aligned} 3 - 2 \times 5 \\ = 3 - 10 \\ = -7 \end{aligned}$$

⑭ 【和歌山89】

$$\begin{aligned} 2 \times (-4) + 3 \\ = -8 + 3 \\ = -5 \end{aligned}$$

⑮ 【広島89】

$$\begin{aligned} 12 - 6 \times (-3) \\ = 12 + 18 \\ = 30 \end{aligned}$$

⑯ 【福岡89】

$$\begin{aligned} 10 + 2 \times (-3) \\ = 10 - 6 \\ = 4 \end{aligned}$$

⑰ 【近畿大学附属高校89】

$$\begin{aligned} -5^2 - (-5) \cdot \\ = -25 - (-125) \\ = -25 + 125 \\ = 100 \end{aligned}$$

⑱ 【愛知89】

$$\begin{aligned} -8 \div 4 + 6 \\ = -2 + 6 \\ = 4 \end{aligned}$$

⑲ 【鹿児島89】

$$\begin{aligned} 6 \times 8 - 27 \div 9 \\ = 48 - 3 \\ = 45 \end{aligned}$$

⑳ 【沖縄89】

$$\begin{aligned} (-3) \times 2 + 4 \\ = -6 + 4 \\ = -2 \end{aligned}$$

正負の数 四則の混じった式の計算 解答編

I. 次の計算をせよ。

① 【三重89】

$$\begin{aligned} & 3 \times (-1)^2 \\ & = 3 \times 1 \\ & = 3 \end{aligned}$$

② 【島根89】

$$\begin{aligned} & 12 - 6 \div 2 \\ & = 12 - 3 \\ & = 9 \end{aligned}$$

③ 【大阪89】

$$\begin{aligned} & (-4) \times 3 + (-7) \\ & = -12 - 7 \\ & = -19 \end{aligned}$$

④ 【岐阜89】

$$\begin{aligned} & 3 + 2 \div (-1)^3 \\ & = 3 + 2 \div (-1) \\ & = 3 - 2 \\ & = 1 \end{aligned}$$

⑤ 【愛知89】

$$\begin{aligned} & 20 + 3 \times (-4) \\ & = 20 - 12 \\ & = 8 \end{aligned}$$

⑥ 【長崎89】

$$\begin{aligned} & 8 + 4 \times 3 \\ & = 8 + 12 \\ & = 20 \end{aligned}$$

⑦ 【長崎89】

$$\begin{aligned} & -3^2 + (-4) \\ & = -9 + 16 \\ & = 7 \end{aligned}$$

⑧ 【和歌山93】

$$\begin{aligned} & 2 \times 3 - 9 \\ & = 6 - 9 \\ & = -3 \end{aligned}$$

⑨ 【奈良93】

$$\begin{aligned} & (-8) \div 2 + 10 \\ & = -4 + 10 \\ & = 6 \end{aligned}$$

⑩ 【宮城89】

$$\begin{aligned} & \frac{2}{9} - \frac{5}{6} \\ & = \frac{4}{18} - \frac{15}{18} \\ & = -\frac{11}{18} \end{aligned}$$

⑪ 【宮崎90】

$$\begin{aligned} & \left(-\frac{1}{2} \right) + \frac{3}{4} \\ & = -\frac{2}{4} + \frac{3}{4} \\ & = \frac{1}{4} \end{aligned}$$

⑫ 【鳥取89】

$$\begin{aligned} & \frac{4}{15} - \frac{3}{5} \times \frac{2}{9} \\ & = \frac{4}{15} - \frac{2}{15} \end{aligned}$$

⑬ 【愛知89】

$$\begin{aligned} & \frac{1}{3} - \frac{1}{3} \times \frac{2}{3} \\ & = \frac{1}{3} - \frac{2}{9} \end{aligned}$$

$= \frac{3}{9} - \frac{2}{9}$
 $= \frac{1}{9}$

⑭ 【青森89】

$$\begin{aligned} & (3.2 - 2.8) \div \left(-\frac{4}{5} \right) \\ & = 0.4 \times \frac{5}{4} \\ & = -\frac{4 \times 5}{10 \times 4} = -\frac{1}{2} \end{aligned}$$

⑮ 【宮崎89】

$$\begin{aligned} & \frac{7}{8} \times \left(-\frac{2}{3} \right) + \frac{1}{6} \\ & = -\frac{7}{12} + \frac{2}{12} = -\frac{5}{12} \end{aligned}$$

⑯ 【山形89】

$$\begin{aligned} & \frac{2}{3} \times \frac{1}{4} - \frac{1}{3} \\ & = \frac{1}{6} - \frac{2}{6} = -\frac{1}{6} \end{aligned}$$

④ 【長野90】

$$\begin{aligned} & -\frac{2}{5} \times \left(-\frac{1}{3} \right) \div \frac{2}{3} - 1 \\ & = \frac{2 \times 1 \times 3}{5 \times 3 \times 2} - 1 \\ & = \frac{1}{5} - \frac{5}{5} = -\frac{4}{5} \end{aligned}$$

⑤ 【新潟89】

$$\begin{aligned} & -\frac{2}{3} \times 0.6 \\ & = -\frac{2 \times 6}{3 \times 10} = -\frac{2}{5} \end{aligned}$$

⑥ 【岐阜89】

$$\begin{aligned} & \frac{1}{3} - 1 \\ & = \frac{1}{3} - \frac{3}{3} = -\frac{2}{3} \end{aligned}$$

⑦ 【沖縄89】

$$\begin{aligned} & \frac{5}{9} - \left(-\frac{2}{3} \right)^2 \\ & = \frac{5}{9} - \frac{4}{9} = \frac{1}{9} \end{aligned}$$

⑧ 【鹿児島89】

$$\begin{aligned} & \frac{1}{3} \div \frac{5}{6} + 0.2 \\ & = \frac{1}{3} \times \frac{6}{5} + \frac{2}{10} \\ & = \frac{2}{5} + \frac{1}{5} \\ & = \frac{3}{5} \end{aligned}$$

⑨ 【兵庫89】

$$\begin{aligned} & \frac{1}{3} + \left(-\frac{1}{2} \right)^2 \div \frac{3}{4} \\ & = \frac{1}{3} + \frac{1}{4} \times \frac{4}{3} \\ & = \frac{1}{3} + \frac{1}{3} \\ & = \frac{2}{3} \end{aligned}$$

⑩ 【広島89】

$$\begin{aligned} & \left(\frac{1}{2} + \frac{1}{4} \right) \times \frac{1}{3} \\ & = \left(\frac{2}{4} + \frac{1}{4} \right) \times \frac{1}{3} \\ & = \frac{3}{4} \times \frac{1}{3} \\ & = \frac{1}{4} \end{aligned}$$

⑪ 【明星高校90】

$$\begin{aligned} & \frac{2}{3} \times 1 \frac{1}{8} + \frac{1}{4} \div \left(-\frac{2}{3} \right) \\ & = \frac{2}{3} \times \frac{9}{8} - \frac{1}{4} \times \frac{3}{2} \\ & = \frac{3}{4} - \frac{3}{8} \\ & = \frac{6}{8} - \frac{3}{8} \\ & = \frac{3}{8} \end{aligned}$$

⑫ 【土浦日本大学高校90】

$$\begin{aligned} & \left(-\frac{1}{2} - \frac{1}{3} \right) \times (-12) \div \left(-\frac{2}{3} \right) \\ & = -\frac{3}{6} - \frac{2}{6} \times 12 \times \frac{3}{2} \\ & = \frac{5 \times 12 \times 3}{6 \times 2} = 15 \end{aligned}$$

⑬ 【成安女子高校90】

$$\begin{aligned} & -\frac{2}{3} + \left(-\frac{3}{2} \right)^2 \div \frac{5}{6} \\ & = -\frac{2}{3} + \frac{9}{4} \times \frac{6}{5} \\ & = -\frac{2}{3} + \frac{27}{10} \\ & = -\frac{2}{3} + \frac{27}{10} \\ & = -\frac{20}{30} + \frac{81}{30} \\ & = \frac{61}{30} \end{aligned}$$

⑭ 【東京女子学院高校】

$$\begin{aligned} & -3^2 \times (-1)^4 - \frac{1}{2} \times (-2)^3 \\ & = -9 \times 1 - \frac{1}{2} \times (-8) \\ & = -9 + 4 = -5 \end{aligned}$$

II. 次の計算をせよ。

① 【長崎89】

$$\begin{aligned} & \frac{3}{4} - \frac{2}{5} \\ & = \frac{15}{20} - \frac{8}{20} = \frac{7}{20} \end{aligned}$$

② 【香川89】

$$\begin{aligned} & (-2)^2 \times \frac{1}{3} - 1 \\ & = 4 \times \frac{1}{3} - 1 \\ & = \frac{4}{3} - \frac{3}{3} = \frac{1}{3} \end{aligned}$$

③ 【愛媛89】

$$\begin{aligned} & \frac{1}{6} - \frac{3}{4} \\ & = \frac{2}{12} - \frac{9}{12} \\ & = -\frac{7}{12} \end{aligned}$$