

『数が苦』を『数楽』に その1

正の数、負の数の加法 1 [(正の数) + (正の数) : 1桁の整数]

次の計算をなさい。

$$\textcircled{1} \begin{array}{l} (+2) + (+1) \\ = +3 \end{array}$$

$$\textcircled{2} \begin{array}{l} (+2) + (+4) \\ = +6 \end{array}$$

$$\textcircled{3} \begin{array}{l} (+2) + (+8) \\ = +10 \end{array}$$

$$\textcircled{4} \begin{array}{l} (+3) + (+3) \\ = +6 \end{array}$$

$$\textcircled{5} \begin{array}{l} (+3) + (+5) \\ = +8 \end{array}$$

$$\textcircled{6} \begin{array}{l} (+3) + (+8) \\ = +11 \end{array}$$

$$\textcircled{7} \begin{array}{l} (+5) + (+3) \\ = +8 \end{array}$$

$$\textcircled{8} \begin{array}{l} (+4) + (+5) \\ = +9 \end{array}$$

$$\textcircled{9} \begin{array}{l} (+5) + (+4) \\ = +9 \end{array}$$

$$\textcircled{10} \begin{array}{l} (+6) + (+7) \\ = +13 \end{array}$$

$$\textcircled{11} \begin{array}{l} (+7) + (+4) \\ = +11 \end{array}$$

$$\textcircled{12} \begin{array}{l} (+7) + (+5) \\ = +12 \end{array}$$

$$\textcircled{13} \begin{array}{l} (+8) + (+1) \\ = +9 \end{array}$$

$$\textcircled{14} \begin{array}{l} (+8) + (+4) \\ = +12 \end{array}$$

$$\textcircled{15} \begin{array}{l} (+9) + (+4) \\ = +13 \end{array}$$

『数が苦』を『数楽』に その2

正の数、負の数の加法 2 [(正の数) + (正の数) : 2桁の整数、小数、分数]

次の計算をなさい。

$$\textcircled{1} \begin{array}{l} (+2) + (+11) \\ = +13 \end{array}$$

$$\textcircled{2} \begin{array}{l} (+3) + (+12) \\ = +15 \end{array}$$

$$\textcircled{3} \begin{array}{l} (+8) + (+21) \\ = +29 \end{array}$$

$$\textcircled{4} \begin{array}{l} (+12) + (+6) \\ = +18 \end{array}$$

$$\textcircled{5} \begin{array}{l} (+13) + (+4) \\ = +17 \end{array}$$

$$\textcircled{6} \begin{array}{l} (+10) + (+41) \\ = +51 \end{array}$$

$$\textcircled{7} \begin{array}{l} (+26) + (+17) \\ = +43 \end{array}$$

$$\textcircled{8} \begin{array}{l} (+18) + (+13) \\ = +31 \end{array}$$

$$\textcircled{9} \begin{array}{l} (+21) + (+16) \\ = +37 \end{array}$$

$$\textcircled{10} \begin{array}{l} (+56) + (+27) \\ = +83 \end{array}$$

$$\textcircled{11} \begin{array}{l} (+0.1) + (+2.7) \\ = +2.8 \end{array}$$

$$\textcircled{12} \begin{array}{l} (+1.4) + (+1.5) \\ = +2.9 \end{array}$$

$$\textcircled{13} \begin{array}{l} (+2.8) + (+0.3) \\ = +3.1 \end{array}$$

$$\textcircled{14} \begin{array}{l} (+\frac{1}{3}) + (+\frac{4}{3}) \\ = +\frac{5}{3} \end{array}$$

$$\textcircled{15} \begin{array}{l} (+\frac{7}{3}) + (+\frac{5}{3}) \\ = +4 \end{array}$$

『数が苦』を『数楽』に その3

正の数、負の数の加法3 [(負の数) + (負の数) : 1桁の整数]

次の計算をなさい。

$$\textcircled{1} \begin{aligned} (-3) + (-4) \\ = -7 \end{aligned}$$

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

$$\textcircled{3} \begin{aligned} (-3) + (-8) \\ = -11 \end{aligned}$$

$$\textcircled{4} \begin{aligned} (-4) + (-5) \\ = -9 \end{aligned}$$

$$\textcircled{5} \begin{aligned} (-6) + (-4) \\ = -10 \end{aligned}$$

$$\textcircled{6} \begin{aligned} (-4) + (-7) \\ = -11 \end{aligned}$$

$$\textcircled{7} \begin{aligned} (-4) + (-8) \\ = -12 \end{aligned}$$

$$\textcircled{8} \begin{aligned} (-5) + (-3) \\ = -8 \end{aligned}$$

$$\textcircled{9} \begin{aligned} (-5) + (-6) \\ = -11 \end{aligned}$$

$$\textcircled{10} \begin{aligned} (-6) + (-7) \\ = -13 \end{aligned}$$

$$\textcircled{11} \begin{aligned} (-7) + (-4) \\ = -11 \end{aligned}$$

$$\textcircled{12} \begin{aligned} (-8) + (-6) \\ = -14 \end{aligned}$$

$$\textcircled{13} \begin{aligned} (-8) + (-8) \\ = -16 \end{aligned}$$

$$\textcircled{14} \begin{aligned} (-8) + (-9) \\ = -17 \end{aligned}$$

$$\textcircled{15} \begin{aligned} (-9) + (-3) \\ = -12 \end{aligned}$$

『数が苦』を『数楽』に その4

正の数、負の数の加法4 [(負の数) + (負の数) : 2桁の整数、小数、分数]

次の計算をなさい。

$$\textcircled{1} \begin{aligned} (-9) + (-5) \\ = -14 \end{aligned}$$

$$\textcircled{2} \begin{aligned} (-1) + (-29) \\ = -30 \end{aligned}$$

$$\textcircled{3} \begin{aligned} (-2) + (-10) \\ = -12 \end{aligned}$$

$$\textcircled{4} \begin{aligned} (-5) + (-11) \\ = -16 \end{aligned}$$

$$\textcircled{5} \begin{aligned} (-6) + (-14) \\ = -20 \end{aligned}$$

$$\textcircled{6} \begin{aligned} (-7) + (-15) \\ = -22 \end{aligned}$$

$$\textcircled{7} \begin{aligned} (-16) + (-6) \\ = -22 \end{aligned}$$

$$\textcircled{8} \begin{aligned} (-23) + (-4) \\ = -27 \end{aligned}$$

$$\textcircled{9} \begin{aligned} (-10) + (-14) \\ = -24 \end{aligned}$$

$$\textcircled{10} \begin{aligned} (-27) + (-13) \\ = -40 \end{aligned}$$

$$\textcircled{11} \begin{aligned} (-1.3) + (-1.2) \\ = -2.5 \end{aligned}$$

$$\textcircled{12} \begin{aligned} (-5.6) + (-0.7) \\ = -6.3 \end{aligned}$$

$$\textcircled{13} \begin{aligned} (-2.6) + (-2.7) \\ = -5.3 \end{aligned}$$

$$\textcircled{14} \begin{aligned} \left(-\frac{7}{2}\right) + \left(-\frac{5}{2}\right) \\ = -6 \end{aligned}$$

$$\textcircled{15} \begin{aligned} \left(-\frac{5}{3}\right) + \left(-\frac{8}{3}\right) \\ = -\frac{13}{3} \end{aligned}$$

『数が苦』を『数楽』に その5

正の数、負の数の加法5 [(正の数) + (負の数) : 1桁の整数]

次の計算をなさい。

$$\textcircled{1} \begin{array}{l} (+2) + (-1) \\ = +1 \end{array}$$

$$\textcircled{2} \begin{array}{l} (+2) + (-4) \\ = -2 \end{array}$$

$$\textcircled{3} \begin{array}{l} (+2) + (-8) \\ = -6 \end{array}$$

$$\textcircled{4} \begin{array}{l} (+3) + (-3) \\ = 0 \end{array}$$

$$\textcircled{5} \begin{array}{l} (+3) + (-5) \\ = -2 \end{array}$$

$$\textcircled{6} \begin{array}{l} (+3) + (-8) \\ = -5 \end{array}$$

$$\textcircled{7} \begin{array}{l} (+5) + (-3) \\ = +2 \end{array}$$

$$\textcircled{8} \begin{array}{l} (+4) + (-5) \\ = -1 \end{array}$$

$$\textcircled{9} \begin{array}{l} (+5) + (-4) \\ = +1 \end{array}$$

$$\textcircled{10} \begin{array}{l} (+6) + (-7) \\ = -1 \end{array}$$

$$\textcircled{11} \begin{array}{l} (+7) + (-4) \\ = +3 \end{array}$$

$$\textcircled{12} \begin{array}{l} (+7) + (-5) \\ = +2 \end{array}$$

$$\textcircled{13} \begin{array}{l} (+8) + (-1) \\ = +7 \end{array}$$

$$\textcircled{14} \begin{array}{l} (+8) + (-4) \\ = +4 \end{array}$$

$$\textcircled{15} \begin{array}{l} (+9) + (-4) \\ = +5 \end{array}$$

『数が苦』を『数楽』に その6

正の数、負の数の加法6 [(正の数) + (負の数) : 2桁の整数、小数、分数]

次の計算をなさい。

$$\textcircled{1} \begin{array}{l} (+2) + (-11) \\ = -9 \end{array}$$

$$\textcircled{2} \begin{array}{l} (+3) + (-12) \\ = -9 \end{array}$$

$$\textcircled{3} \begin{array}{l} (+8) + (-21) \\ = -13 \end{array}$$

$$\textcircled{4} \begin{array}{l} (+12) + (-6) \\ = +6 \end{array}$$

$$\textcircled{5} \begin{array}{l} (+13) + (-4) \\ = +9 \end{array}$$

$$\textcircled{6} \begin{array}{l} (+10) + (-41) \\ = -31 \end{array}$$

$$\textcircled{7} \begin{array}{l} (+26) + (-17) \\ = +9 \end{array}$$

$$\textcircled{8} \begin{array}{l} (+18) + (-13) \\ = +5 \end{array}$$

$$\textcircled{9} \begin{array}{l} (+21) + (-16) \\ = +5 \end{array}$$

$$\textcircled{10} \begin{array}{l} (+56) + (-27) \\ = +29 \end{array}$$

$$\textcircled{11} \begin{array}{l} (+0.1) + (-2.7) \\ = -2.6 \end{array}$$

$$\textcircled{12} \begin{array}{l} (+1.4) + (-1.5) \\ = -0.1 \end{array}$$

$$\textcircled{13} \begin{array}{l} (+2.8) + (-0.3) \\ = +2.5 \end{array}$$

$$\textcircled{14} \begin{array}{l} (+\frac{1}{3}) + (-\frac{4}{3}) \\ = -1 \end{array}$$

$$\textcircled{15} \begin{array}{l} (+\frac{7}{3}) + (-\frac{5}{3}) \\ = +\frac{2}{3} \end{array}$$

『数が苦』を『数楽』に その7

正の数、負の数の加法7 [(負の数) + (正の数) : 1桁の整数]

次の計算をなさい。

$$\textcircled{1} \quad (-3) + (+4) \\ = +1$$

$$\textcircled{2} \quad (-3) + (+7) \\ = +4$$

$$\textcircled{3} \quad (-3) + (+8) \\ = +5$$

$$\textcircled{4} \quad (-4) + (+5) \\ = +1$$

$$\textcircled{5} \quad (-6) + (+4) \\ = -2$$

$$\textcircled{6} \quad (-4) + (+7) \\ = +3$$

$$\textcircled{7} \quad (-4) + (+8) \\ = +4$$

$$\textcircled{8} \quad (-5) + (+3) \\ = -2$$

$$\textcircled{9} \quad (-5) + (+6) \\ = +1$$

$$\textcircled{10} \quad (-6) + (+7) \\ = +1$$

$$\textcircled{11} \quad (-7) + (+4) \\ = -3$$

$$\textcircled{12} \quad (-8) + (+6) \\ = -2$$

$$\textcircled{13} \quad (-8) + (+8) \\ = 0$$

$$\textcircled{14} \quad (-8) + (+9) \\ = +1$$

$$\textcircled{15} \quad (-9) + (+3) \\ = -6$$

『数が苦』を『数楽』に その8

正の数、負の数の加法8 [(負の数) + (正の数) : 2桁の整数、小数、分数]

次の計算をなさい。

$$\textcircled{1} \quad (-9) + (+5) \\ = -4$$

$$\textcircled{2} \quad (-1) + (+29) \\ = +28$$

$$\textcircled{3} \quad (-2) + (+10) \\ = +8$$

$$\textcircled{4} \quad (-5) + (+11) \\ = +6$$

$$\textcircled{5} \quad (-6) + (+14) \\ = +8$$

$$\textcircled{6} \quad (-7) + (+15) \\ = +8$$

$$\textcircled{7} \quad (-16) + (+6) \\ = -10$$

$$\textcircled{8} \quad (-23) + (+4) \\ = -19$$

$$\textcircled{9} \quad (-10) + (+14) \\ = +4$$

$$\textcircled{10} \quad (-27) + (+13) \\ = -14$$

$$\textcircled{11} \quad (-1.3) + (+1.2) \\ = -0.1$$

$$\textcircled{12} \quad (-5.6) + (+0.7) \\ = -4.9$$

$$\textcircled{13} \quad (-2.6) + (+2.7) \\ = +0.1$$

$$\textcircled{14} \quad \left(-\frac{7}{2}\right) + \left(+\frac{5}{2}\right) \\ = -1$$

$$\textcircled{15} \quad \left(-\frac{5}{3}\right) + \left(+\frac{8}{3}\right) \\ = +1$$

『数が苦』を『数楽』に その9

正の数、負の数の加法9 [3数以上の和：1桁・2桁の整数]

次の計算をなさい。

$$\begin{aligned} \textcircled{1} & (+2) + (-4) + (-3) \\ &= (+2) + (-7) \\ &= -5 \end{aligned}$$

$$\begin{aligned} \textcircled{2} & (-2) + (+4) + (+8) \\ &= (-2) + (+12) \\ &= +10 \end{aligned}$$

$$\begin{aligned} \textcircled{3} & (+2) + (-5) + (+8) \\ &= (+2) + (+8) + (-5) \\ &= (+10) + (-5) \\ &= +5 \end{aligned}$$

$$\begin{aligned} \textcircled{4} & (+3) + (-6) + (+3) \\ &= (+3) + (+3) + (-6) \\ &= (+6) + (-6) \\ &= 0 \end{aligned}$$

$$\begin{aligned} \textcircled{5} & (-8) + (-5) + (+8) \\ &= (-13) + (+8) \\ &= -5 \end{aligned}$$

$$\begin{aligned} \textcircled{6} & (-12) + (+6) + (-8) \\ &= (-12) + (-8) + (+6) \\ &= (-20) + (+6) \\ &= -14 \end{aligned}$$

$$\begin{aligned} \textcircled{7} & (+3) + (-7) + (+5) + (-2) \\ &= (+3) + (+5) + (-7) + (-2) \\ &= (+8) + (-9) \\ &= -1 \end{aligned}$$

$$\begin{aligned} \textcircled{8} & (+3) + (-6) + (-7) + (+8) \\ &= (+3) + (+8) + (-6) + (-7) \\ &= (+11) + (-13) \\ &= -2 \end{aligned}$$

$$\begin{aligned} \textcircled{9} & (-9) + (+21) + (+16) + (-15) \\ &= (+21) + (+16) + (-9) + (-15) \\ &= (+37) + (-24) \\ &= +13 \end{aligned}$$

$$\begin{aligned} \textcircled{10} & (+56) + (-23) + (+24) + (-27) \\ &= (+56) + (+24) + (-23) + (-27) \\ &= (+80) + (-50) \\ &= +30 \end{aligned}$$

『数が苦』を『数楽』に その10

正の数、負の数の加法 10 [3数以上の和：2桁の整数 小数 分数]

次の計算をなさい。

$$\begin{aligned} \textcircled{1} & (+31) + (-73) + (+52) + (+29) \\ &= (+31) + (+52) + (+29) + (-73) \\ &= (+112) + (-73) \\ &= +39 \end{aligned}$$

$$\begin{aligned} \textcircled{2} & (-35) + (+61) + (-74) + (-80) \\ &= (+61) + (-35) + (-74) + (-80) \\ &= (+61) + (-189) \\ &= -128 \end{aligned}$$

$$\begin{aligned} \textcircled{3} & (-19) + (-23) + (-15) + (-15) \\ &= -72 \end{aligned}$$

$$\begin{aligned} \textcircled{4} & (+56) + (-23) + (+34) + (-47) \\ &= (+56) + (+34) + (-23) + (-47) \\ &= (+90) + (-70) \\ &= +20 \end{aligned}$$

$$\begin{aligned} \textcircled{5} & (+3.1) + (-2.7) + (+1.4) + (+1.5) \\ &= (+3.1) + (+1.4) + (+1.5) + (-2.7) \\ &= (+6.0) + (-2.7) \\ &= +3.3 \end{aligned}$$

$$\begin{aligned} \textcircled{6} & (+2.8) + (-1.3) + (-2.9) + (+1.4) \\ &= (+2.8) + (+1.4) + (-1.3) + (-2.9) \\ &= (+4.2) + (-4.2) \\ &= 0 \end{aligned}$$

$$\begin{aligned} \textcircled{7} & (+\frac{7}{6}) + (-\frac{5}{6}) + (+\frac{13}{6}) + (+\frac{11}{6}) \\ &= (+\frac{7}{6}) + (+\frac{13}{6}) + (+\frac{11}{6}) + (-\frac{5}{6}) \\ &= (+\frac{31}{6}) + (-\frac{5}{6}) \\ &= (+\frac{26}{6}) \\ &= (+\frac{13}{3}) \end{aligned}$$

$$\begin{aligned} \textcircled{8} & (+\frac{7}{3}) + (-\frac{5}{2}) + (+\frac{1}{3}) + (-\frac{3}{2}) \\ &= (+\frac{7}{3}) + (+\frac{1}{3}) + (-\frac{5}{2}) + (-\frac{3}{2}) \\ &= (+\frac{8}{3}) + (-\frac{8}{2}) \\ &= (+\frac{16}{6}) + (-\frac{24}{6}) \\ &= (-\frac{8}{6}) \\ &= (-\frac{4}{3}) \end{aligned}$$

『数が苦』を『数楽』に その1 1

正の数、負の数の減法 1 [(正の数) - (正の数) : 整数、小数、分数]

次の計算をなさい。

$$\begin{aligned} \textcircled{1} & (+2) - (+11) \\ &= (+2) + (-11) \\ &= -9 \end{aligned}$$

$$\begin{aligned} \textcircled{2} & (+3) - (+12) \\ &= (+3) + (-12) \\ &= -9 \end{aligned}$$

$$\begin{aligned} \textcircled{3} & (+8) - (+21) \\ &= (+8) + (-21) \\ &= -13 \end{aligned}$$

$$\begin{aligned} \textcircled{4} & (+12) - (+6) \\ &= (+12) + (-6) \\ &= +6 \end{aligned}$$

$$\begin{aligned} \textcircled{5} & (+13) - (+4) \\ &= (+13) + (-4) \\ &= +9 \end{aligned}$$

$$\begin{aligned} \textcircled{6} & (+10) - (+41) \\ &= (+10) + (-41) \\ &= -31 \end{aligned}$$

$$\begin{aligned} \textcircled{7} & (+26) - (+17) \\ &= (+26) + (-17) \\ &= +9 \end{aligned}$$

$$\begin{aligned} \textcircled{8} & (+18) - (+13) \\ &= (+18) + (-13) \\ &= +5 \end{aligned}$$

$$\begin{aligned} \textcircled{9} & (+21) - (+16) \\ &= (+21) + (-16) \\ &= +5 \end{aligned}$$

$$\begin{aligned} \textcircled{10} & (+56) - (+27) \\ &= (+56) + (-27) \\ &= +29 \end{aligned}$$

$$\begin{aligned} \textcircled{11} & (+0.1) - (+2.7) \\ &= (+0.1) + (-2.7) \\ &= -2.6 \end{aligned}$$

$$\begin{aligned} \textcircled{12} & (+1.4) - (+1.5) \\ &= (+1.4) + (-1.5) \\ &= -0.1 \end{aligned}$$

$$\begin{aligned} \textcircled{13} & (+2.8) - (+0.3) \\ &= (+2.8) + (-0.3) \\ &= +2.5 \end{aligned}$$

$$\begin{aligned} \textcircled{14} & \left(+\frac{1}{3}\right) - \left(+\frac{4}{3}\right) \\ &= \left(+\frac{1}{3}\right) + \left(-\frac{4}{3}\right) \\ &= -\frac{3}{3} \\ &= -1 \end{aligned}$$

$$\begin{aligned} \textcircled{15} & \left(+\frac{7}{3}\right) - \left(+\frac{5}{3}\right) \\ &= \left(+\frac{7}{3}\right) + \left(-\frac{5}{3}\right) \\ &= +\frac{2}{3} \end{aligned}$$

『数が苦』を『数楽』に その12

正の数、負の数の減法2 [(負の数) - (正の数) : 整数、小数、分数]

次の計算をなさい。

$$\begin{aligned} \textcircled{1} & (-9) - (+5) \\ &= (-9) + (-5) \\ &= -14 \end{aligned}$$

$$\begin{aligned} \textcircled{2} & (-1) - (+29) \\ &= (-1) + (-29) \\ &= -30 \end{aligned}$$

$$\begin{aligned} \textcircled{3} & (-2) - (+10) \\ &= (-2) + (-10) \\ &= -12 \end{aligned}$$

$$\begin{aligned} \textcircled{4} & (-5) - (+11) \\ &= (-5) + (-11) \\ &= -16 \end{aligned}$$

$$\begin{aligned} \textcircled{5} & (-6) - (+14) \\ &= (-6) + (-14) \\ &= -20 \end{aligned}$$

$$\begin{aligned} \textcircled{6} & (-7) - (+15) \\ &= (-7) + (-15) \\ &= -22 \end{aligned}$$

$$\begin{aligned} \textcircled{7} & (-16) - (+6) \\ &= (-16) + (-6) \\ &= -22 \end{aligned}$$

$$\begin{aligned} \textcircled{8} & (-23) - (+4) \\ &= (-23) + (-4) \\ &= -27 \end{aligned}$$

$$\begin{aligned} \textcircled{9} & (-10) - (+14) \\ &= (-10) + (-14) \\ &= -24 \end{aligned}$$

$$\begin{aligned} \textcircled{10} & (-27) - (+13) \\ &= (-27) + (-13) \\ &= -40 \end{aligned}$$

$$\begin{aligned} \textcircled{11} & (-1.3) - (+1.2) \\ &= (-1.3) + (-1.2) \\ &= -2.5 \end{aligned}$$

$$\begin{aligned} \textcircled{12} & (-5.6) - (+0.7) \\ &= (-5.6) + (-0.7) \\ &= -6.3 \end{aligned}$$

$$\begin{aligned} \textcircled{13} & (-2.6) - (+2.7) \\ &= (-2.6) + (-2.7) \\ &= -5.3 \end{aligned}$$

$$\begin{aligned} \textcircled{14} & \left(-\frac{7}{2}\right) - \left(+\frac{5}{2}\right) \\ &= \left(-\frac{7}{2}\right) + \left(-\frac{5}{2}\right) \\ &= -\frac{12}{2} \\ &= -6 \end{aligned}$$

$$\begin{aligned} \textcircled{15} & \left(-\frac{5}{3}\right) - \left(+\frac{8}{3}\right) \\ &= \left(-\frac{5}{3}\right) + \left(-\frac{8}{3}\right) \\ &= -\frac{13}{3} \end{aligned}$$

『数が苦』を『数楽』に その13

正の数、負の数の減法3 [(正の数) - (負の数) : 整数、小数、分数]

次の計算をなさい。

$$\begin{aligned} \textcircled{1} & (+2) - (-11) \\ &= (+2) + (+11) \\ &= +13 \end{aligned}$$

$$\begin{aligned} \textcircled{2} & (+3) - (-12) \\ &= (+3) + (+12) \\ &= +15 \end{aligned}$$

$$\begin{aligned} \textcircled{3} & (+8) - (-21) \\ &= (+8) + (+21) \\ &= +29 \end{aligned}$$

$$\begin{aligned} \textcircled{4} & (+12) - (-6) \\ &= (+12) + (+6) \\ &= +18 \end{aligned}$$

$$\begin{aligned} \textcircled{5} & (+13) - (-4) \\ &= (+13) + (+4) \\ &= +17 \end{aligned}$$

$$\begin{aligned} \textcircled{6} & (+10) - (-41) \\ &= (+10) + (+41) \\ &= +51 \end{aligned}$$

$$\begin{aligned} \textcircled{7} & (+26) - (-17) \\ &= (+26) + (+17) \\ &= +43 \end{aligned}$$

$$\begin{aligned} \textcircled{8} & (+18) - (-13) \\ &= (+18) + (+13) \\ &= +31 \end{aligned}$$

$$\begin{aligned} \textcircled{9} & (+21) - (-16) \\ &= (+21) + (+16) \\ &= +37 \end{aligned}$$

$$\begin{aligned} \textcircled{10} & (+56) - (-27) \\ &= (+56) + (+27) \\ &= +83 \end{aligned}$$

$$\begin{aligned} \textcircled{11} & (+0.1) - (-2.7) \\ &= (+0.1) + (+2.7) \\ &= +2.8 \end{aligned}$$

$$\begin{aligned} \textcircled{12} & (+1.4) - (-1.5) \\ &= (+1.4) + (+1.5) \\ &= +2.9 \end{aligned}$$

$$\begin{aligned} \textcircled{13} & (+2.8) - (-0.3) \\ &= (+2.8) + (+0.3) \\ &= +3.1 \end{aligned}$$

$$\begin{aligned} \textcircled{14} & \left(+\frac{1}{3}\right) - \left(-\frac{4}{3}\right) \\ &= \left(+\frac{1}{3}\right) + \left(+\frac{4}{3}\right) \\ &= +\frac{5}{3} \end{aligned}$$

$$\begin{aligned} \textcircled{15} & \left(+\frac{7}{3}\right) - \left(-\frac{5}{3}\right) \\ &= \left(+\frac{7}{3}\right) + \left(+\frac{5}{3}\right) \\ &= +\frac{12}{3} \\ &= +4 \end{aligned}$$

『数が苦』を『数楽』に その14

正の数、負の数の減法4 [(負の数) - (負の数) : 整数、小数、分数]

次の計算をなさい。

$$\begin{aligned} \textcircled{1} & (-9) - (-5) \\ &= (-9) + (+5) \\ &= -4 \end{aligned}$$

$$\begin{aligned} \textcircled{2} & (-1) - (-29) \\ &= (-1) + (+29) \\ &= +28 \end{aligned}$$

$$\begin{aligned} \textcircled{3} & (-2) - (-10) \\ &= (-2) + (+10) \\ &= +8 \end{aligned}$$

$$\begin{aligned} \textcircled{4} & (-5) - (-11) \\ &= (-5) + (+11) \\ &= +6 \end{aligned}$$

$$\begin{aligned} \textcircled{5} & (-6) - (-14) \\ &= (-6) + (+14) \\ &= +8 \end{aligned}$$

$$\begin{aligned} \textcircled{6} & (-7) - (-15) \\ &= (-7) + (+15) \\ &= +8 \end{aligned}$$

$$\begin{aligned} \textcircled{7} & (-16) - (-6) \\ &= (-16) + (+6) \\ &= -10 \end{aligned}$$

$$\begin{aligned} \textcircled{8} & (-23) - (-4) \\ &= (-23) + (+4) \\ &= -19 \end{aligned}$$

$$\begin{aligned} \textcircled{9} & (-10) - (-14) \\ &= (-10) + (+14) \\ &= +4 \end{aligned}$$

$$\begin{aligned} \textcircled{10} & (-27) - (-13) \\ &= (-27) + (+13) \\ &= -14 \end{aligned}$$

$$\begin{aligned} \textcircled{11} & (-1.3) - (-1.2) \\ &= (-1.3) + (+1.2) \\ &= -0.1 \end{aligned}$$

$$\begin{aligned} \textcircled{12} & (-5.6) - (-0.7) \\ &= (-5.6) + (+0.7) \\ &= -4.9 \end{aligned}$$

$$\begin{aligned} \textcircled{13} & (-2.6) - (-2.7) \\ &= (-2.6) + (+2.7) \\ &= +0.1 \end{aligned}$$

$$\begin{aligned} \textcircled{14} & \left(-\frac{7}{2}\right) - \left(-\frac{5}{2}\right) \\ &= \left(-\frac{7}{2}\right) + \left(+\frac{5}{2}\right) \\ &= -\frac{2}{2} \\ &= -1 \end{aligned}$$

$$\begin{aligned} \textcircled{15} & \left(-\frac{5}{3}\right) - \left(-\frac{8}{3}\right) \\ &= \left(-\frac{5}{3}\right) + \left(+\frac{8}{3}\right) \\ &= +\frac{3}{3} \\ &= +1 \end{aligned}$$

『数が苦』を『数楽』に その15

正の数、負の数の加法・減法 1 [混合算：1桁・2桁の整数]

次の計算をなさい。

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

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

$$\begin{aligned} \textcircled{3} & (+2) + (-5) - (+8) \\ &= (+2) + (-5) + (-8) \\ &= -11 \end{aligned}$$

$$\begin{aligned} \textcircled{4} & (+3) - (-6) - (+3) \\ &= (+3) + (+6) + (-3) \\ &= +6 \end{aligned}$$

$$\begin{aligned} \textcircled{5} & (-8) - (-5) + (+8) \\ &= (-8) + (+5) + (+8) \\ &= +5 \end{aligned}$$

$$\begin{aligned} \textcircled{6} & (-12) + (+6) - (-8) \\ &= (-12) + (+6) + (+8) \\ &= +2 \end{aligned}$$

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

$$\begin{aligned} \textcircled{8} & (+3) - (-6) - (-7) - (+8) \\ &= (+3) + (+6) + (+7) + (-8) \\ &= +8 \end{aligned}$$

$$\begin{aligned} \textcircled{9} & (-9) - (+21) + (+16) + (-15) \\ &= (-9) + (-21) + (+16) + (-15) \\ &= -29 \end{aligned}$$

$$\begin{aligned} \textcircled{10} & (+56) - (-23) + (+24) - (-27) \\ &= (+56) + (+23) + (+24) + (+27) \\ &= +130 \end{aligned}$$

『数が苦』を『数楽』に その16

正の数、負の数の加法・減法2 [混合算：2桁の整数、小数、分数]

次の計算をなさい。

$$\begin{aligned} \textcircled{1} & (+31) + (-73) - (+52) + (+29) \\ &= (+31) + (-73) + (-52) + (+29) \\ &= -65 \end{aligned}$$

$$\begin{aligned} \textcircled{2} & (-35) + (+61) - (-74) - (-80) \\ &= (-35) + (+61) + (+74) + (+80) \\ &= +180 \end{aligned}$$

$$\begin{aligned} \textcircled{3} & (-19) - (-23) + (-15) - (-15) \\ &= (-19) + (+23) + (-15) + (+15) \\ &= +4 \end{aligned}$$

$$\begin{aligned} \textcircled{4} & (+56) - (-23) - (+34) - (-47) \\ &= (+56) + (+23) + (-34) + (+47) \\ &= +92 \end{aligned}$$

$$\begin{aligned} \textcircled{5} & (+3.1) - (-2.7) + (+1.4) + (+1.5) \\ &= (+3.1) + (+2.7) + (+1.4) + (+1.5) \\ &= +8.7 \end{aligned}$$

$$\begin{aligned} \textcircled{6} & (+2.8) - (-1.3) + (-2.9) - (+1.4) \\ &= (+2.8) + (+1.3) + (-2.9) + (-1.4) \\ &= -0.2 \end{aligned}$$

$$\begin{aligned} \textcircled{7} & (+\frac{7}{6}) + (-\frac{5}{6}) - (+\frac{13}{6}) - (+\frac{11}{6}) \\ &= (+\frac{7}{6}) + (-\frac{5}{6}) + (-\frac{13}{6}) + (-\frac{11}{6}) \\ &= -\frac{22}{6} \end{aligned}$$

$$\begin{aligned} \textcircled{8} & (+\frac{7}{3}) - (-\frac{5}{2}) - (+\frac{1}{3}) - (-\frac{3}{2}) \\ &= (+\frac{7}{3}) + (+\frac{5}{2}) + (-\frac{1}{3}) + (+\frac{3}{2}) \\ &= (+\frac{6}{3}) + (+\frac{8}{2}) \\ &= (+2) + (+4) \\ &= +6 \end{aligned}$$

『数が苦』を『数楽』に その17

正の数、負の数の加法・減法3 [項を答える：2桁の整数、小数、分数]

次の式の項を書け。

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

項：+2と-4と+3

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

項：-2と-4と+8

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

項：+2と-5と-8

$$\textcircled{4} \begin{aligned} & (+3) - (-6) - (+3) \\ &= (+3) + (+6) + (-3) \end{aligned}$$

項：+3と+6と-3

$$\textcircled{5} \begin{aligned} & (-8) - (-5) + (+8) \\ &= (-8) + (+5) + (+8) \end{aligned}$$

項：-8と+5と+8

$$\textcircled{6} \begin{aligned} & (-12) + (+6) - (-8) \\ &= (-12) + (+6) + (+8) \end{aligned}$$

項：-12と+6と+8

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

項：+3と+7と-5と-2

$$\textcircled{8} \begin{aligned} & (+3) - (-6) - (-7) - (+8) \\ &= (+3) + (+6) + (+7) + (-8) \end{aligned}$$

項：+3と+6と+7と-8

$$\textcircled{9} \begin{aligned} & (-9) - (+21) + (+16) + (-15) \\ &= (-9) + (-21) + (+16) + (-15) \end{aligned}$$

項：-9と-21と+16と-15

$$\textcircled{10} \begin{aligned} & (+56) - (-23) + (+24) - (-27) \\ &= (+56) + (+23) + (+24) + (+27) \end{aligned}$$

項：+56と+23と+24と+27

『数が苦』を『数楽』に その18

正の数、負の数の加法・減法4

[項を並べた式で表す：2桁の整数、小数、分数]

次の式を項を並べた式で表せ。

$$\begin{aligned} \textcircled{1} & (+31) + (-73) - (+52) + (+29) \\ &= (+31) + (-73) + (-52) + (+29) \\ &= 31 - 73 - 52 + 29 \end{aligned}$$

$$\begin{aligned} \textcircled{2} & (-35) + (+61) - (-74) - (-80) \\ &= (-35) + (+61) + (+74) + (+80) \\ &= -35 + 61 + 74 + 80 \end{aligned}$$

$$\begin{aligned} \textcircled{3} & (-19) - (-23) + (-15) - (-15) \\ &= (-19) + (+23) + (-15) + (+15) \\ &= -19 + 23 - 15 + 15 \end{aligned}$$

$$\begin{aligned} \textcircled{4} & (+56) - (-23) - (+34) - (-47) \\ &= (+56) + (+23) + (-34) + (+47) \\ &= 56 + 23 - 34 + 47 \end{aligned}$$

$$\begin{aligned} \textcircled{5} & (+3.1) - (-2.7) + (+1.4) + (+1.5) \\ &= (+3.1) + (+2.7) + (+1.4) + (+1.5) \\ &= 3.1 + 2.7 + 1.4 + 1.5 \end{aligned}$$

$$\begin{aligned} \textcircled{6} & (+2.8) - (-1.3) + (-2.9) - (+1.4) \\ &= (+2.8) + (+1.3) + (-2.9) + (-1.4) \\ &= 2.8 + 1.3 - 2.9 - 1.4 \end{aligned}$$

$$\begin{aligned} \textcircled{7} & (+\frac{7}{6}) + (-\frac{5}{6}) - (+\frac{13}{6}) - (+\frac{11}{6}) \\ &= (+\frac{7}{6}) + (-\frac{5}{6}) + (-\frac{13}{6}) + (-\frac{11}{6}) \\ &= \frac{7}{6} - \frac{5}{6} - \frac{13}{6} - \frac{11}{6} \end{aligned}$$

$$\begin{aligned} \textcircled{8} & (+\frac{7}{3}) - (-\frac{5}{2}) - (+\frac{1}{3}) - (-\frac{3}{2}) \\ &= (+\frac{7}{3}) + (+\frac{5}{2}) + (-\frac{1}{3}) + (+\frac{3}{2}) \\ &= \frac{7}{3} + \frac{5}{2} - \frac{1}{3} + \frac{3}{2} \end{aligned}$$

『数が苦』を『数楽』に その19

正の数、負の数の加法・減法 5

[項を並べた式の計算 1 : 1桁・2桁の整数、小数、分数]

次の計算をせよ。

$$\textcircled{1} \quad 5 - 3 + 7 \\ = 9$$

$$\textcircled{2} \quad -8 + 7 - 6 \\ = -7$$

$$\textcircled{3} \quad -10 - 8 - 3 \\ = -21$$

$$\textcircled{4} \quad 5 - 7 - 12 \\ = -14$$

$$\textcircled{5} \quad 31 - 73 - 52 + 29 \\ = -65$$

$$\textcircled{6} \quad -35 + 61 + 74 + 80 \\ = 180$$

$$\textcircled{7} \quad -19 + 23 - 15 + 15 \\ = 4$$

$$\textcircled{8} \quad 56 + 23 - 34 + 47 \\ = 92$$

$$\textcircled{9} \quad -13 - 14 + 23 + 34 \\ = 30$$

$$\textcircled{10} \quad -14 - 24 - 36 - 39 \\ = -113$$

$$\textcircled{11} \quad 3.1 + 2.7 + 1.4 + 1.5 \\ = 8.7$$

$$\textcircled{12} \quad 2.8 + 1.3 - 2.9 - 1.4 \\ = -0.2$$

$$\textcircled{13} \quad \frac{7}{6} - \frac{5}{6} - \frac{13}{6} - \frac{11}{6} \\ = -\frac{11}{3}$$

$$\textcircled{14} \quad \frac{7}{3} + \frac{5}{2} - \frac{1}{3} + \frac{3}{2} \\ = \frac{7}{3} - \frac{1}{3} + \frac{5}{2} + \frac{3}{2} \\ = 2 + 4 \\ = 6$$

『数が苦』を『数楽』に その20

正の数、負の数の加法・減法6

[項を並べた式の計算2: 1桁・2桁の整数、小数、分数]

次の式の項を書け。

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

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

$$\begin{aligned} \textcircled{3} & (+2) - 5 - (+8) \\ &= (+2) - 5 + (-8) \\ &= 2 - 5 - 8 \\ &= -11 \end{aligned}$$

$$\begin{aligned} \textcircled{4} & 3 - (-6) - 3 \\ &= 3 + (+6) - 3 \\ &= 3 + 6 - 3 \\ &= 6 \end{aligned}$$

$$\begin{aligned} \textcircled{5} & (-8) - (-5) + 8 \\ &= (-8) + (+5) + 8 \\ &= -8 + 5 + 8 \\ &= 5 \end{aligned}$$

$$\begin{aligned} \textcircled{6} & -12 + (+6) - (-8) \\ &= -12 + (+6) + (+8) \\ &= -12 + 6 + 8 \\ &= 2 \end{aligned}$$

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

$$\begin{aligned} \textcircled{8} & 3 - (-6) - 7 - (+8) \\ &= 3 + (+6) - 7 + (-8) \\ &= 3 + 6 - 7 - 8 \\ &= -6 \end{aligned}$$

$$\begin{aligned} \textcircled{9} & -9 - 21 + (+16) + (-15) \\ &= -9 - 21 + (+16) + (-15) \\ &= -9 - 21 + 16 - 15 \\ &= -29 \end{aligned}$$

$$\begin{aligned} \textcircled{10} & 56 - (-23) + 24 - (-27) \\ &= 56 + (+23) + 24 + (+27) \\ &= 56 + 23 + 24 + 27 \\ &= 130 \end{aligned}$$

$$\begin{aligned} \textcircled{11} & 3.1 - (-2.7) + 1.4 - 1.5 \\ &= 3.1 + (+2.7) + 1.4 - 1.5 \\ &= 3.1 + 2.7 + 1.4 - 1.5 \\ &= 5.7 \end{aligned}$$

$$\begin{aligned} \textcircled{12} & -2.8 + 1.3 - (-2) - 1.4 \\ &= -2.8 + 1.3 + (+2) - 1.4 \\ &= -2.8 + 1.3 + 2 - 1.4 \\ &= -0.9 \end{aligned}$$

『数が苦』を『数楽』に その2 1

正の数、負の数の乗法 1

[(正の数) × (正の数) : 1桁・2桁の整数、小数、分数]

次の計算をなさい。

$$\textcircled{1} (+2) \times (+1) \\ = 2$$

$$\textcircled{2} (+2) \times (+4) \\ = 8$$

$$\textcircled{3} (+2) \times (+8) \\ = 16$$

$$\textcircled{4} (+3) \times 0 \\ = 0$$

$$\textcircled{5} 0 \times (+4) \\ = 0$$

$$\textcircled{6} (+10) \times (+41) \\ = 410$$

$$\textcircled{7} (+26) \times (+17) \\ = 442$$

$$\textcircled{8} (+18) \times (+13) \\ = 234$$

$$\textcircled{9} (+0.1) \times (+2.7) \\ = 0.27$$

$$\textcircled{10} (+1.4) \times (+1.5) \\ = 2.1$$

$$\textcircled{11} (+2.8) \times (+0.3) \\ = 0.84$$

$$\textcircled{12} \left(+\frac{1}{3}\right) \times \left(+\frac{4}{3}\right) \\ = \frac{1 \times 4}{3 \times 3} \\ = \frac{4}{9}$$

$$\textcircled{13} \left(+\frac{7}{3}\right) \times (+5) \\ = \frac{7 \times 5}{3} \\ = \frac{35}{3}$$

『数が苦』を『数楽』に その22

正の数、負の数の乗法2

[(正の数) × (負の数) : 1桁・2桁の整数、小数、分数]

次の計算をなさい。

$$\textcircled{1} (+1) \times (-2) \\ = -2$$

$$\textcircled{2} (+2) \times (-5) \\ = -10$$

$$\textcircled{3} (+3) \times (-8) \\ = -24$$

$$\textcircled{4} (+4) \times (-4) \\ = -16$$

$$\textcircled{5} (+23) \times (-4) \\ = -92$$

$$\textcircled{6} (+10) \times (-23) \\ = -230$$

$$\textcircled{7} (+25) \times (-17) \\ = -425$$

$$\textcircled{8} (+18) \times (-23) \\ = -414$$

$$\textcircled{9} (+0.1) \times (-3.7) \\ = -0.37$$

$$\textcircled{10} (+1.5) \times (-1.2) \\ = -1.8$$

$$\textcircled{11} (+0.8) \times (-0.3) \\ = -0.24$$

$$\textcircled{12} \left(+\frac{1}{3}\right) \times \left(-\frac{3}{4}\right) \\ = -\frac{1 \times 3}{3 \times 4} \\ = -\frac{1}{4}$$

$$\textcircled{13} \left(+\frac{10}{3}\right) \times \left(-\frac{3}{5}\right) \\ = -\frac{10 \times 3}{3 \times 5} \\ = -2$$

『数が苦』を『数楽』に その23

正の数、負の数の乗法3

[(負の数) × (正の数) : 1桁・2桁の整数、小数、分数]

次の計算をなさい。

$$\textcircled{1} (-2) \times (+4) \\ = -8$$

$$\textcircled{2} (-8) \times (+3) \\ = -24$$

$$\textcircled{3} (-7) \times (+8) \\ = -56$$

$$\textcircled{4} (-5) \times (+5) \\ = -25$$

$$\textcircled{5} (-3) \times (+14) \\ = -42$$

$$\textcircled{6} (-21) \times (+10) \\ = -210$$

$$\textcircled{7} (-23) \times (+17) \\ = -391$$

$$\textcircled{8} (-19) \times (+13) \\ = -247$$

$$\textcircled{9} (-2.1) \times (+2.7) \\ = -5.67$$

$$\textcircled{10} (-2.4) \times (+1.5) \\ = -3.6$$

$$\textcircled{11} (-0.1) \times (+0.1) \\ = -0.01$$

$$\textcircled{12} (-5) \times \left(+\frac{5}{2}\right) \\ = -\frac{5 \times 5}{2} \\ = -\frac{25}{2}$$

$$\textcircled{13} \left(-\frac{8}{3}\right) \times \left(+\frac{5}{6}\right) \\ = -\frac{8 \times 5}{3 \times 6} \\ = -\frac{20}{9}$$

『数が苦』を『数楽』に その24

正の数、負の数の乗法4

[(負の数) × (負の数) : 1桁・2桁の整数、小数、分数]

次の計算をなさい。

$$\textcircled{1} (-7) \times (-6) \\ = 42$$

$$\textcircled{2} (-8) \times (-9) \\ = 72$$

$$\textcircled{3} (-6) \times (-8) \\ = 48$$

$$\textcircled{4} (-7) \times (-7) \\ = 49$$

$$\textcircled{5} (-33) \times (-4) \\ = 132$$

$$\textcircled{6} (-15) \times (-41) \\ = 615$$

$$\textcircled{7} (-6) \times (-17) \\ = 102$$

$$\textcircled{8} (-18) \times (-14) \\ = 252$$

$$\textcircled{9} (-3.1) \times (-3.7) \\ = 11.47$$

$$\textcircled{10} (-1.2) \times (-1.5) \\ = 1.8$$

$$\textcircled{11} (-2.8) \times (-1.3) \\ = -3.64$$

$$\textcircled{12} \left(-\frac{7}{12}\right) \times \left(-\frac{3}{14}\right) \\ = \frac{7 \times 3}{12 \times 14} \\ = \frac{1}{8}$$

$$\textcircled{13} \left(-\frac{9}{2}\right) \times \left(-\frac{8}{3}\right) \\ = \frac{9 \times 8}{2 \times 3} \\ = 12$$

『数が苦』を『数楽』に その25

正の数、負の数の乗法5 [3数以上の積：1桁・2桁の整数、小数、分数]
次の計算をなさい。

$$\textcircled{1} (+1) \times (-2) \times (+3) \\ = -6$$

$$\textcircled{2} (+2) \times (-5) \times (-4) \\ = 40$$

$$\textcircled{3} (+3) \times (-8) \times (+3) \times (-5) \\ = 360$$

$$\textcircled{4} (-2) \times (-2) \times (-2) \\ = -8$$

$$\textcircled{5} (-2) \times (-4) \times (-1) \times (-3) \\ = 24$$

$$\textcircled{6} (-25) \times (-7) \times (-4) \times (+2) \\ = -140$$

$$\textcircled{7} \left(-\frac{7}{3}\right) \times \left(-\frac{3}{5}\right) \times \left(+\frac{5}{14}\right) \\ = \frac{7 \times 3 \times 5}{3 \times 5 \times 14} \\ = \frac{1}{2}$$

$$\textcircled{8} \left(-\frac{3}{4}\right) \times \left(-\frac{8}{9}\right) \times \left(+\frac{5}{14}\right) \times \left(-\frac{21}{10}\right) \\ = -\frac{3 \times 8 \times 5 \times 21}{4 \times 9 \times 14 \times 10} \\ = -\frac{1}{2}$$

$$\textcircled{9} \left(-\frac{3}{8}\right) \times (-5) \times \left(+\frac{4}{15}\right) \times (-2) \\ = -\frac{3 \times 5 \times 4 \times 2}{8 \times 15} \\ = -1$$

$$\textcircled{10} \left(-\frac{19}{17}\right) \times \left(-\frac{31}{9}\right) \times \left(+\frac{91}{11}\right) \times 0 \\ = 0$$

『数が苦』を『数楽』に その26

正の数、負の数の乗法6 [累乗が入った積：1桁の整数、小数、分数]
次の計算をなさい。

$$\begin{aligned} \textcircled{1} 5^2 \\ &= 5 \times 5 \\ &= 25 \end{aligned}$$

$$\begin{aligned} \textcircled{2} 2^3 \\ &= 2 \times 2 \times 2 \\ &= 8 \end{aligned}$$

$$\begin{aligned} \textcircled{3} (-3)^2 \\ &= (-3) \times (-3) \\ &= 9 \end{aligned}$$

$$\begin{aligned} \textcircled{4} (-2)^3 \\ &= (-2) \times (-2) \times (-2) \\ &= -8 \end{aligned}$$

$$\begin{aligned} \textcircled{5} -3^2 \\ &= -3 \times 3 \\ &= -9 \end{aligned}$$

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

$$\begin{aligned} \textcircled{7} 3^2 \times 4 \\ &= 9 \times 4 \\ &= 36 \end{aligned}$$

$$\begin{aligned} \textcircled{8} 2^3 \times (-5) \\ &= 8 \times (-5) \\ &= -40 \end{aligned}$$

$$\begin{aligned} \textcircled{9} (-2)^2 \times 4 \\ &= 4 \times 4 \\ &= 16 \end{aligned}$$

$$\begin{aligned} \textcircled{10} (-2)^3 \times 5 \\ &= -8 \times 5 \\ &= -40 \end{aligned}$$

$$\begin{aligned} \textcircled{11} -2^2 \times 4 \\ &= -4 \times 4 \\ &= -16 \end{aligned}$$

$$\begin{aligned} \textcircled{12} -2^3 \times (-5) \\ &= -8 \times (-5) \\ &= 40 \end{aligned}$$

$$\begin{aligned} \textcircled{13} -2^2 \times 4 \times 3^3 \\ &= -4 \times 4 \times 27 \\ &= -432 \end{aligned}$$

$$\begin{aligned} \textcircled{14} (-3)^3 \times (-2)^3 \times 5 \\ &= (-27) \times (-8) \times 5 \\ &= 1080 \end{aligned}$$

$$\begin{aligned} \textcircled{15} \left(-\frac{2}{3}\right)^2 \\ &= \left(-\frac{2}{3}\right) \times \left(-\frac{2}{3}\right) \\ &= \frac{4}{9} \end{aligned}$$

$$\begin{aligned} \textcircled{16} \left(-\frac{2}{3}\right)^3 \times \left(-\frac{9}{8}\right)^2 \\ &= \left(-\frac{8}{27}\right) \times \left(-\frac{81}{64}\right) \\ &= \frac{3}{8} \end{aligned}$$

$$\begin{aligned} \textcircled{17} \left(-\frac{1}{2}\right)^4 \times (-6)^2 \\ &= \frac{1}{16} \times 36 \\ &= \frac{9}{4} \end{aligned}$$

$$\begin{aligned} \textcircled{18} (-1)^{200} \\ &= 1 \end{aligned}$$

『数が苦』を『数楽』に その27

正の数、負の数の除法 1 [2 数の商 : (整数) \div (整数) = (整数)]

次の計算をなさい。

$$\textcircled{1} (+6) \div (+3) \\ = 2$$

$$\textcircled{2} (+12) \div (-6) \\ = -2$$

$$\textcircled{3} (-42) \div (+7) \\ = -6$$

$$\textcircled{4} (-63) \div (-9) \\ = 7$$

$$\textcircled{5} (+2) \div (-2) \\ = -1$$

$$\textcircled{6} (-15) \div (-1) \\ = 15$$

$$\textcircled{7} 0 \div (-6) \\ = 0$$

$$\textcircled{8} (-6) \div 0 \\ \text{答えは無し。計算できません。}$$

$$\textcircled{9} (+40) \div (+10) \\ = 4$$

$$\textcircled{10} (-54) \div (+3) \\ = -18$$

$$\textcircled{11} (+26) \div (+13) \\ = 2$$

$$\textcircled{12} (+250) \div (-25) \\ = -10$$

$$\textcircled{13} -72 \div (+24) \\ = -3$$

$$\textcircled{14} -180 \div (-12) \\ = 15$$

$$\textcircled{15} -210 \div 14 \\ = -15$$

$$\textcircled{16} 396 \div (-11) \\ = -36$$

『数が苦』を『数楽』に その28

正の数、負の数の除法2 [2数の商：(整数) ÷ (整数) = (分数)]

次の計算をなさい。

$$\begin{aligned} \textcircled{1} \quad (+2) \div (-3) \\ = -\frac{2}{3} \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad (-7) \div (-9) \\ = \frac{7}{9} \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad (-11) \div 3 \\ = -\frac{11}{3} \end{aligned}$$

$$\begin{aligned} \textcircled{4} \quad 1 \div (-6) \\ = -\frac{1}{6} \end{aligned}$$

$$\begin{aligned} \textcircled{5} \quad -14 \div 9 \\ = -\frac{14}{9} \end{aligned}$$

$$\begin{aligned} \textcircled{6} \quad (+9) \div 2 \\ = \frac{9}{2} \end{aligned}$$

$$\begin{aligned} \textcircled{7} \quad (+6) \div (-8) \\ = -\frac{6}{8} \\ = -\frac{3}{4} \end{aligned}$$

$$\begin{aligned} \textcircled{8} \quad -9 \div 15 \\ = -\frac{9}{15} \\ = -\frac{3}{5} \end{aligned}$$

$$\begin{aligned} \textcircled{9} \quad (+14) \div (-18) \\ = -\frac{14}{18} \\ = -\frac{7}{9} \end{aligned}$$

$$\begin{aligned} \textcircled{10} \quad (+21) \div (-14) \\ = -\frac{21}{14} \\ = -\frac{3}{2} \end{aligned}$$

$$\begin{aligned} \textcircled{11} \quad -8 \div (-56) \\ = \frac{8}{56} \\ = \frac{1}{7} \end{aligned}$$

$$\begin{aligned} \textcircled{12} \quad 36 \div (-42) \\ = -\frac{36}{42} \\ = -\frac{6}{7} \end{aligned}$$

$$\begin{aligned} \textcircled{13} \quad -32 \div 48 \\ = -\frac{32}{48} \\ = -\frac{2}{3} \end{aligned}$$

$$\begin{aligned} \textcircled{14} \quad (-54) \div (-63) \\ = \frac{54}{63} \\ = \frac{6}{7} \end{aligned}$$

『数が苦』を『数楽』に その29

正の数、負の数の除法3 [2数の商：小数入り]

次の計算をなさい。

$$\textcircled{1} (+0.8) \div (+2) \\ = 0.4$$

$$\textcircled{2} (-2.7) \div 9 \\ = -0.3$$

$$\textcircled{3} -5.4 \div 3 \\ = -1.8$$

$$\textcircled{4} (+42) \div (+1.2) \\ = 35$$

$$\textcircled{5} -0.42 \div (+0.7) \\ = -0.6$$

$$\textcircled{6} 0.35 \div (-0.07) \\ = -5$$

$$\textcircled{7} 1.56 \div 1.2 \\ = 1.3$$

$$\textcircled{12} 0.2 \div (-0.3) \\ = -\frac{0.2}{0.3} \\ = -\frac{2}{3}$$

$$\textcircled{13} 1.4 \div (-18) \\ = -\frac{1.4}{18} \\ = -\frac{14}{180} \\ = -\frac{7}{90}$$

$$\textcircled{14} -42 \div (-6.3) \\ = \frac{42}{6.3} \\ = \frac{420}{63} \\ = \frac{20}{3}$$

$$\textcircled{15} (-1.8) \div (-1.4) \\ = \frac{1.8}{1.4} \\ = \frac{18}{14} \\ = \frac{9}{7}$$

$$\textcircled{16} (+1.2) \div (-1.5) \\ = -\frac{1.2}{1.5} \\ = -\frac{12}{15} \\ = -\frac{4}{5}$$

『数が苦』を『数楽』に その30

正の数、負の数の除法4 [2数の商：分数入り]

次の計算をなさい。

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

$$\begin{aligned}\textcircled{3} \quad & -8 \div \frac{12}{9} \\ &= -8 \times \frac{9}{12} \\ &= -\frac{8 \times 9}{12} \\ &= -6\end{aligned}$$

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

$$\begin{aligned}\textcircled{7} \quad & \left(-\frac{15}{8}\right) \div 9 \\ &= \left(-\frac{15}{8}\right) \times \frac{1}{9} \\ &= \frac{15 \times 1}{8 \times 9} \\ &= \frac{5}{24}\end{aligned}$$

$$\begin{aligned}\textcircled{9} \quad & \left(-\frac{1}{2}\right) \div \left(-\frac{1}{3}\right) \\ &= \left(-\frac{1}{2}\right) \times \left(-\frac{3}{1}\right) \\ &= \frac{3}{2}\end{aligned}$$

$$\begin{aligned}\textcircled{11} \quad & -\frac{35}{9} \div \left(-\frac{7}{18}\right) \\ &= -\frac{35}{9} \times \left(-\frac{18}{7}\right) \\ &= 10\end{aligned}$$

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

$$\begin{aligned}\textcircled{4} \quad & -9 \div \left(-\frac{2}{3}\right) \\ &= -9 \times \left(-\frac{3}{2}\right) \\ &= \frac{9 \times 3}{2} \\ &= \frac{27}{2}\end{aligned}$$

$$\begin{aligned}\textcircled{6} \quad & -\frac{14}{3} \div (-7) \\ &= -\frac{14}{3} \times \left(-\frac{1}{7}\right) \\ &= \frac{14 \times 1}{3 \times 7} \\ &= \frac{2}{3}\end{aligned}$$

$$\begin{aligned}\textcircled{8} \quad & \left(-\frac{9}{16}\right) \div (-18) \\ &= -\frac{9}{16} \times \left(-\frac{1}{18}\right) \\ &= \frac{9 \times 1}{16 \times 18} \\ &= \frac{1}{32}\end{aligned}$$

$$\begin{aligned}\textcircled{10} \quad & \frac{7}{12} \div \left(-\frac{3}{14}\right) \\ &= \frac{7}{12} \times \left(-\frac{14}{3}\right) \\ &= -\frac{7 \times 14}{12 \times 3} \\ &= -\frac{49}{18}\end{aligned}$$

$$\begin{aligned}\textcircled{12} \quad & -\frac{80}{21} \div \frac{25}{14} \\ &= -\frac{80}{21} \times \frac{14}{25} \\ &= -\frac{32}{15}\end{aligned}$$

『数が苦』を『数楽』に その31

正の数、負の数の乗法・除法1 [混合算：整数、累乗入り]

次の計算をなさい。

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

$$\begin{aligned} \textcircled{3} & -5 \times (-42) \div 7 \\ &= -5 \times (-42) \times \frac{1}{7} \\ &= \frac{5 \times 42}{7} \\ &= 30 \end{aligned}$$

$$\begin{aligned} \textcircled{5} & -5 \times (-6) \div 7 \\ &= -5 \times (-6) \times \frac{1}{7} \\ &= \frac{5 \times 6}{7} \\ &= \frac{30}{7} \end{aligned}$$

$$\begin{aligned} \textcircled{7} & 40 \div 10 \times (-2)^2 \\ &= 40 \div 10 \times 4 \\ &= 40 \times \frac{1}{10} \times 4 \\ &= \frac{40 \times 4}{10} \\ &= 16 \end{aligned}$$

$$\begin{aligned} \textcircled{9} & 26 \div 13 \times 2 \\ &= 26 \times \frac{1}{13} \times 2 \\ &= \frac{26 \times 2}{13} \\ &= 4 \end{aligned}$$

$$\begin{aligned} \textcircled{11} & 2 \div 3 \times (-2) \\ &= 2 \times \frac{1}{3} \times (-2) \\ &= -\frac{2 \times 2}{3} \\ &= -\frac{4}{3} \end{aligned}$$

$$\begin{aligned} \textcircled{13} & -2^5 \div 24 \div 3 \\ &= -32 \div 24 \div 3 \\ &= -32 \times \frac{1}{24} \times \frac{1}{3} \\ &= -\frac{32}{24 \times 3} \\ &= -\frac{4}{9} \end{aligned}$$

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

$$\begin{aligned} \textcircled{4} & -8 \times (-63) \div (-9) \\ &= -8 \times (-63) \times \left(-\frac{1}{9}\right) \\ &= -\frac{8 \times 63}{9} \\ &= -56 \end{aligned}$$

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

$$\begin{aligned} \textcircled{8} & -54 \div 3 \times (-5) \\ &= -54 \times \frac{1}{3} \times (-5) \\ &= \frac{54 \times 5}{3} \\ &= 90 \end{aligned}$$

$$\begin{aligned} \textcircled{10} & 250 \div (-5^2) \times (-3) \\ &= 250 \div (-25) \times (-3) \\ &= 250 \times \left(-\frac{1}{25}\right) \times (-3) \\ &= \frac{250 \times 3}{25} \\ &= 30 \end{aligned}$$

$$\begin{aligned} \textcircled{12} & -5^2 \div (-250) \times (-3) \\ &= -25 \div (-250) \times (-3) \\ &= -25 \times \left(-\frac{1}{250}\right) \times (-3) \\ &= -\frac{25 \times 3}{250} \\ &= -\frac{3}{10} \end{aligned}$$

$$\begin{aligned} \textcircled{14} & -180 \div (-12) \div 5 \\ &= -180 \div (-12) \div 5 \\ &= -180 \times \left(-\frac{1}{12}\right) \times \frac{1}{5} \\ &= \frac{180}{12 \times 5} \\ &= 3 \end{aligned}$$

$$\begin{aligned}
& \textcircled{15} -210 \div 14 \div (-3) \\
& = -210 \times \frac{1}{14} \left(-\frac{1}{3}\right) \\
& = \frac{210}{14 \times 3} \\
& = 5
\end{aligned}$$

$$\begin{aligned}
& \textcircled{17} -2 \div 14 \div (-3) \\
& = -2 \times \frac{1}{14} \times \left(-\frac{1}{3}\right) \\
& = \frac{2}{14 \times 3} \\
& = \frac{1}{21}
\end{aligned}$$

$$\begin{aligned}
& \textcircled{16} 396 \div (-11) \div (-3^2) \\
& = 396 \div (-11) \div (-9) \\
& = 396 \times \left(-\frac{1}{11}\right) \times \left(-\frac{1}{9}\right) \\
& = \frac{396}{11 \times 9} \\
& = 4
\end{aligned}$$

$$\begin{aligned}
& \textcircled{18} (-3)^2 \div (-33) \div (-6) \\
& = 9 \div (-33) \div (-6) \\
& = 9 \times \left(-\frac{1}{33}\right) \times \left(-\frac{1}{6}\right) \\
& = \frac{9}{33 \times 6} \\
& = \frac{1}{22}
\end{aligned}$$

『数が苦』を『数楽』に その32

正の数、負の数の乗法・除法2 [混合算：分数]
次の計算をなさい。

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

$$\begin{aligned} \textcircled{2} & 5 \times (-21) \div \left(-\frac{15}{2}\right) \\ &= 5 \times (-21) \times \left(-\frac{2}{15}\right) \\ &= \frac{5 \times 21 \times 2}{15} \\ &= 14 \end{aligned}$$

$$\begin{aligned} \textcircled{3} & -8 \times \left(-\frac{3}{2}\right) \div \frac{12}{9} \\ &= -8 \times \left(-\frac{3}{2}\right) \times \frac{9}{12} \\ &= \frac{8 \times 3 \times 9}{2 \times 12} \\ &= 9 \end{aligned}$$

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

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

$$\begin{aligned} \textcircled{6} & -\frac{14}{3} \div (-7) \times \left(-\frac{2}{3}\right) \\ &= -\frac{14}{3} \times \left(-\frac{1}{7}\right) \times \left(-\frac{2}{3}\right) \\ &= -\frac{14 \times 2}{3 \times 7 \times 3} \\ &= -\frac{4}{9} \end{aligned}$$

$$\begin{aligned} \textcircled{7} & \left(-\frac{15}{8}\right) \div \frac{9}{16} \times \frac{3}{4} \\ &= \left(-\frac{15}{8}\right) \times \frac{16}{9} \times \frac{3}{4} \\ &= -\frac{15 \times 16 \times 3}{8 \times 9 \times 4} \\ &= -\frac{5}{2} \end{aligned}$$

$$\begin{aligned} \textcircled{8} & -\frac{9}{16} \div \frac{21}{4} \times \frac{14}{3} \\ &= -\frac{9}{16} \times \frac{4}{21} \times \frac{14}{3} \\ &= -\frac{9 \times 4 \times 14}{16 \times 21 \times 3} \\ &= -\frac{1}{2} \end{aligned}$$

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

$$\begin{aligned} \textcircled{10} & \frac{7}{12} \div (-14) \div \frac{5}{4} \\ &= \frac{7}{12} \times \left(-\frac{1}{14}\right) \times \frac{4}{5} \\ &= -\frac{7 \times 4}{12 \times 14 \times 5} \\ &= -\frac{1}{30} \end{aligned}$$

$$\begin{aligned} \textcircled{11} & -\frac{35}{9} \div \left(-\frac{7}{8}\right) \div \left(-\frac{5}{18}\right) \\ &= -\frac{35}{9} \times \left(-\frac{8}{7}\right) \times \left(-\frac{18}{5}\right) \\ &= -\frac{35 \times 8 \times 18}{9 \times 7 \times 5} \\ &= -16 \end{aligned}$$

$$\begin{aligned} \textcircled{12} & -\frac{80}{21} \div \frac{25}{14} \div \left(-\frac{2}{5}\right) \\ &= -\frac{80}{21} \times \frac{14}{25} \times \left(-\frac{5}{2}\right) \\ &= \frac{80 \times 14 \times 5}{21 \times 25 \times 2} \\ &= \frac{16}{3} \end{aligned}$$

『数が苦』を『数楽』に その33

正の数、負の数の四則[混合算：整数、累乗入り]

次の計算をなさい。

$$\begin{aligned}\textcircled{1} & -3 + 3 \times 3 \\ & = -3 + 9 \\ & = 6\end{aligned}$$

$$\begin{aligned}\textcircled{3} & (-54) \div (+3) - 5 \\ & = -18 - 5 \\ & = -23\end{aligned}$$

$$\begin{aligned}\textcircled{5} & -4 \times (-2) - (-63) \div (-3^2) \\ & = -4 \times (-2) - (-63) \div (-9) \\ & = 8 - 7 \\ & = 1\end{aligned}$$

$$\begin{aligned}\textcircled{7} & -8 + 5 - (-3)^3 \\ & = -8 + 5 - (-27) \\ & = -8 + 5 + (+27) \\ & = 24\end{aligned}$$

$$\begin{aligned}\textcircled{9} & (-4-6) \times (-10) \\ & = (-10) \times (-10) \\ & = 100\end{aligned}$$

$$\begin{aligned}\textcircled{11} & -30 \div \{(-6) \times (-5)\} \\ & = -30 \div 30 \\ & = -1\end{aligned}$$

$$\begin{aligned}\textcircled{13} & 5 - 2 \times \{(-3)^2 - 4^2\} \\ & = 5 - 2 \times \{9 - 16\} \\ & = 5 - 2 \times (-7) \\ & = 5 + 14 \\ & = 19\end{aligned}$$

$$\begin{aligned}\textcircled{2} & 12 - (-4) \times 6 \\ & = 12 - (-24) \\ & = 12 + (+24) \\ & = 36\end{aligned}$$

$$\begin{aligned}\textcircled{4} & (-42) \div (+7) - 3 \times (-7) \\ & = -6 - (-21) \\ & = -6 + (+21) \\ & = 15\end{aligned}$$

$$\begin{aligned}\textcircled{6} & (-2)^3 - 3^2 \times 5 \\ & = -8 - 9 \times 5 \\ & = -8 - 45 \\ & = -53\end{aligned}$$

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

$$\begin{aligned}\textcircled{10} & -18 \div \{(-12) - (-6)\} \\ & = -18 \div \{(-12) + (+6)\} \\ & = -18 \div (-6) \\ & = 3\end{aligned}$$

$$\begin{aligned}\textcircled{12} & (-4 - 2 \times 5) \div (-2) \\ & = (-4 - 10) \div (-2) \\ & = (-14) \div (-2) \\ & = 7\end{aligned}$$

$$\begin{aligned}\textcircled{14} & \{(-2-3)^2 - 5\} \div (-4) \\ & = \{(-5)^2 - 5\} \div (-4) \\ & = (25 - 5) \div (-4) \\ & = 20 \div (-4) \\ & = -5\end{aligned}$$