

1～47, 75～94 : 計算をしなさい。

48～74, 94～100 : 方程式, 比例式を解きなさい。

1. $\begin{aligned} & (+3) + (+7) \\ & = 10 \end{aligned}$	2. $\begin{aligned} & (-7) + (-6) \\ & = -13 \end{aligned}$	3. $\begin{aligned} & (+2) - (+9) \\ & = 2 - 9 \\ & = -7 \end{aligned}$
4. $\begin{aligned} & (+5) - (-11) \\ & = 5 + 11 \\ & = 16 \end{aligned}$	5. $\begin{aligned} & (-0.3) + (+1.1) \\ & = 0.8 \end{aligned}$	6. $\begin{aligned} & (-1.4) - (+0.6) \\ & = -1.4 - 0.6 \\ & = -2 \end{aligned}$
7. $\begin{aligned} & \left(+\frac{4}{5}\right) + \left(-\frac{2}{3}\right) \\ & = \frac{4}{5} - \frac{2}{3} \\ & = \frac{12-10}{15} \\ & = \frac{2}{15} \end{aligned}$	8. $\begin{aligned} & \left(-\frac{3}{5}\right) - \left(-\frac{1}{4}\right) \\ & = -\frac{3}{5} + \frac{1}{4} \\ & = \frac{-12+5}{20} \\ & = -\frac{7}{20} \end{aligned}$	9. $\begin{aligned} & 9 - 6 + 4 \\ & = 7 \end{aligned}$
10. $\begin{aligned} & 8 - 7 + 6 - 9 \\ & = -2 \end{aligned}$	11. $\begin{aligned} & -12 - (-8) - 5 \\ & = -12 + 8 - 5 \\ & = -9 \end{aligned}$	12. $\begin{aligned} & 11 - (+13) - 12 - (-14) \\ & = 11 - 13 - 12 + 14 \\ & = 0 \end{aligned}$
13. $\begin{aligned} & -2 + 0.7 + 1.8 \\ & = 0.5 \end{aligned}$	14. $\begin{aligned} & -\frac{3}{4} - \left(-\frac{5}{6}\right) - \frac{5}{8} \\ & = -\frac{3}{4} + \frac{5}{6} - \frac{5}{8} \\ & = -\frac{18}{24} + \frac{20}{24} - \frac{15}{24} \\ & = -\frac{13}{24} \end{aligned}$	15. $\begin{aligned} & (-2) \times (-9) \\ & = 18 \end{aligned}$
16. $\begin{aligned} & \frac{8}{15} \times \left(-\frac{3}{4}\right) \\ & = -\frac{8 \times 3}{15 \times 4} \\ & = -\frac{2}{5} \end{aligned}$	17. $\begin{aligned} & (-2) \times 3 \times (-5) \\ & = 30 \end{aligned}$	18. $\begin{aligned} & (-6)^3 \\ & = (-6) \times (-6) \times (-6) \\ & = -216 \end{aligned}$
19. $\begin{aligned} & 12 \div (-2) \\ & = -6 \end{aligned}$	20. $\begin{aligned} & 18 \div \left(-\frac{9}{10}\right) \\ & = 18 \times \left(-\frac{10}{9}\right) \\ & = -20 \end{aligned}$	21. $\begin{aligned} & -10 \times \frac{4}{5} \div (-8) \\ & = -10 \times \frac{4}{5} \times \left(-\frac{1}{8}\right) \\ & = \frac{10 \times 4 \times 1}{5 \times 8} \\ & = 1 \end{aligned}$

22. $5 \div \left(-\frac{10}{3}\right) \div \left(-\frac{9}{4}\right)$ $= 5 \times \left(-\frac{3}{10}\right) \times \left(-\frac{4}{9}\right)$ $= \frac{5 \times 3 \times 4}{10 \times 9}$ $= \frac{2}{3}$	23. $7 + 3 \times (-4)$ $= 7 - 12$ $= -5$	24. $-2 - 24 \div (-6)$ $= -2 + 4$ $= 2$
25. $(-2) \times 3 + (-4) \times (-5)$ $= -6 + 20$ $= 14$	26. $\{5 - (13 - 6)\} \times 5$ $= (5 - 7) \times 5$ $= -2 \times 5$ $= -10$	27. $(-3)^2 \times (-2) + (-4^2)$ $= 9 \times (-2) - 16$ $= -18 - 16$ $= -34$
28. $24 \times \left(\frac{1}{6} - \frac{3}{4}\right)$ $= 24 \times \frac{1}{6} + 24 \times \left(-\frac{3}{4}\right)$ $= 4 - 18$ $= -14$	29. $\frac{7}{9} \times (-5) + \frac{2}{9} \times (-5)$ $= \left(\frac{7}{9} + \frac{2}{9}\right) \times (-5)$ $= 1 \times (-5)$ $= -5$	30. 次の数を素因数分解しなさい。 12 $12 = 2^2 \times 3$
31. 次の数を素因数分解しなさい。 132 $132 = 2^2 \times 3 \times 11$	32. 次の数を素因数分解しなさい。 294 $294 = 2 \times 3 \times 7^2$	33. $4x + 9x$ $= 13x$
34. $8 - 6a - 1 + a$ $= -5a + 7$	35. $(7x + 4) + (3x - 9)$ $= 7x + 4 + 3x - 9$ $= 10x - 5$	36. $(-9 - 2y) + (-6y - 2)$ $= -9 - 2y - 6y - 2$ $= -8y - 11$
37. $(9a - 1) - (2a + 4)$ $= 9a - 1 - 2a - 4$ $= 7a - 5$	38. $(3a - 4) - (-5a + 7)$ $= 3a - 4 + 5a - 7$ $= 8a - 11$	39. $12x \times (-3)$ $= -36x$

40.	41.	42.
$15m \div \left(-\frac{3}{5}\right)$ $= 15m \times \left(-\frac{5}{3}\right)$ $= -25m$	$-5(4x-3)$ $= -5 \times 4x - 5 \times (-3)$ $= -20x + 15$	$(-12a+6) \div (-3)$ $= (-12a+6) \times \left(-\frac{1}{3}\right)$ $= 4a - 2$
43.	44.	45.
$\frac{7x+5}{4} \times 8$ $= (7x+5) \times 2$ $= 14x + 10$	$5(4x-3) + 3(5x+2)$ $= 20x - 15 + 15x + 6$ $= 35x - 9$	$-4(2m+7) + 3(-m+6)$ $= -8m - 28 - 3m + 18$ $= -11m - 10$
46.	47.	48.
$8(2x-1) - 7(4x+2)$ $= 16x - 8 - 28x - 14$ $= -12x - 22$	$\frac{2}{3}(6x-15) - \frac{2}{5}(-5x-20)$ $= \frac{2}{3} \times 6x + \frac{2}{3} \times (-15) - \frac{2}{5} \times (-5x) - \frac{2}{5} \times (-20)$ $= 4x - 10 + 2x + 8$ $= 6x - 2$	$\frac{1}{7}x = -2$ $\frac{1}{7}x \times 7 = -2 \times 7$ $x = -14$
49.	50.	51.
$-8x = -16$ $-8x \div (-8) = -16 \div (-8)$ $x = 2$	$2x + 10 = 16$ $2x = 16 - 10$ $2x = 6$ $x = 3$	$15x = 36 - 3x$ $15x + 3x = 36$ $18x = 36$ $x = 2$
52.	53.	54.
$9x + 3 = 8x + 6$ $9x - 8x = 6 - 3$ $x = 3$	$5x - 12 = 7x + 6$ $5x - 7x = 6 + 12$ $-2x = 18$ $x = -9$	$3x - 12 = 20 - 5x$ $3x + 5x = 20 + 12$ $8x = 32$ $x = 4$
55.	56.	57.
$7 - x = 7 - 3x$ $-x + 3x = 7 - 7$ $2x = 0$ $x = 0$	$5x - 6 = 2x + 9$ $5x - 2x = 9 + 6$ $3x = 15$ $x = 5$	$3x - 5 = 7x - 17$ $3x - 7x = -17 + 5$ $-4x = -12$ $x = 3$

58. $30 + 2x = 2 - 5x$ $2x + 5x = 2 - 30$ $7x = -28$ $x = -4$	59. $7x + 17 = 3x - 7$ $7x - 3x = -7 - 17$ $4x = -24$ $x = -6$	60. $10x - 7 = -1 + 7x$ $10x - 7x = -1 + 7$ $3x = 6$ $x = 2$
61. $7 + 5x = -1 - x$ $6x = -8$ $x = -8 \div 6$ $x = -\frac{8}{6}$ $x = -\frac{4}{3}$	62. $2(x + 3) + 6 = 5x$ $2x + 6 + 6 = 5x$ $2x + 12 = 5x$ $-3x = -12$ $x = 4$	63. $x + 3(2x - 1) = 11$ $x + 6x - 3 = 11$ $7x = 14$ $x = 2$
64. $7x - 6 = 3(x - 4)$ $7x - 6 = 3x - 12$ $4x = -6$ $x = -6 \div 4$ $x = -\frac{6}{4}$ $x = -\frac{3}{2}$	65. $5(x - 3) = 2(x + 3)$ $5x - 15 = 2x + 6$ $3x = 21$ $x = 7$	66. $-2(3x - 7) = -x - 6$ $-6x + 14 = -x - 6$ $-5x = -20$ $x = 4$
67. $0.8x - 2 = 0.6x - 3$ $(0.8x - 2) \times 10 = (0.6x - 3) \times 10$ $8x - 20 = 6x - 30$ $2x = -10$ $x = -5$	68. $0.2x - 3 = -1.3x + 6$ $(0.2x - 3) \times 10 = (-1.3x + 6) \times 10$ $2x - 30 = -13x + 60$ $15x = 90$ $x = 6$	69. $0.21x - 0.6 = 0.42 - 0.3x$ $(0.21x - 0.6) \times 100 = (0.42 - 0.3x) \times 100$ $21x - 60 = 42 - 30x$ $51x = 102$ $x = 2$
70. $\frac{1}{4}x + 2 = \frac{2}{3}x - 3$ $\left(\frac{1}{4}x + 2\right) \times 12 = \left(\frac{2}{3}x - 3\right) \times 12$ $3x + 24 = 8x - 36$ $-5x = -60$ $x = 12$	71. $\frac{x-1}{2} = 2x + 1$ $\frac{(x-1)}{2} \times 2 = (2x+1) \times 2$ $x-1 = 4x+2$ $-3x = 3$ $x = -1$	72. $x : 4 = 5 : 2$ $2x = 4 \times 5$ $2x = 20$ $x = 10$

73. $8:18=4:x$ $8 \times x = 18 \times 4$ $8x = 72$ $x = 9$	74. $14:6=(x+5):9$ $6(x+5)=9 \times 14$ $6x+30=126$ $6x=96$ $x=16$	75. $-6+(-5)$ $=-11$
76. $-\frac{1}{5}+\frac{1}{2}$ $=-\frac{2}{10}+\frac{5}{10}$ $=\frac{3}{10}$	77. $4-(-6)$ $=4+6$ $=10$	78. $6-(-3)+(-2)$ $=6+3-2$ $=7$
79. $3 \times (-7)$ $=-21$	80. $(-2)^5 \times 5$ $=-32 \times 5$ $=-160$	81. $\left(-\frac{4}{9}\right) \div \frac{3}{2}$ $=-\frac{4}{9} \times \frac{2}{3}$ $=-\frac{8}{27}$
82. $-\frac{1}{2} \times \frac{3}{7} \div \left(-\frac{3}{14}\right)$ $=-\frac{1}{2} \times \frac{3}{7} \times \left(-\frac{14}{3}\right)$ $=1$	83. $6-4 \div (-2)$ $=6+2$ $=8$	84. $-8 \div 2 - 3 \times (-2)$ $=-4+6$ $=2$
85. $4+2 \times (3-7)$ $=4+2 \times (-4)$ $=4-8$ $=-4$	86. $-3^2 \times \frac{4}{9} + 8$ $=-9 \times \frac{4}{9} + 8$ $=-4+8$ $=4$	87. $\left(\frac{1}{2}-\frac{4}{3}\right) \div \frac{1}{6}$ $=\left(\frac{1}{2}-\frac{4}{3}\right) \times 6$ $=\frac{1}{2} \times 6 - \frac{4}{3} \times 6$ $=3-8$ $=-5$
88. $8y-2y$ $=6y$	89. $2a+3-(1-5a)$ $=2a+3-1+5a$ $=7a+2$	90. $(-5a) \times (-6)$ $=30a$

91. $(12x+8) \div 4$ $= 12x \div 4 + 8 \div 4$ $= 3x + 2$	92. $9x - 13 + 7(4 - x)$ $= 9x - 13 + 28 - 7x$ $= 2x + 15$	93. $3(a+2) - 2(a-1)$ $= 3a + 6 - 2a + 2$ $= a + 8$
94. $\frac{1}{2}(x-3) - \frac{1}{7}(3x-8)$ $= \frac{1}{2}x - \frac{3}{2} - \frac{3}{7}x + \frac{8}{7}$ $= \frac{7}{14}x - \frac{21}{14} - \frac{6}{14}x + \frac{16}{14}$ $= \frac{1}{14}x - \frac{5}{14}$	95. $5x = 2x - 9$ $5x - 2x = -9$ $3x = -9$ $x = -3$	93. $9x + 2 = 4x + 17$ $9x - 4x = 17 - 2$ $5x = 15$ $x = 3$
91. $x + 6 = 3x - 8$ $x - 3x = -8 - 6$ $-2x = -14$ $x = 7$	92. $3 - 2x = -5x + 9$ $-2x + 5x = 9 - 3$ $3x = 6$ $x = 2$	93. $3x - 8 = 7(x + 4)$ $3x - 8 = 7x + 28$ $3x - 7x = 28 + 8$ $-4x = 36$ $x = -9$
95. $x = \frac{1}{2}x - 3$ $2x = x - 6$ $2x - x = -6$ $x = -6$	96. $\frac{3}{10}x - \frac{3}{2} = \frac{4}{5}x + 1$ $\left(\frac{3}{10}x - \frac{3}{2}\right) \times 10 = \left(\frac{4}{5}x + 1\right) \times 10$ $3x - 15 = 8x + 10$ $3x - 8x = 10 + 15$ $-5x = 25$ $x = -5$	97. $\frac{5x-6}{3} = \frac{x+3}{2}$ $\frac{(5x-6)}{3} \times 6 = \frac{(x+3)}{2} \times 6$ $(5x-6) \times 2 = (x+3) \times 3$ $10x - 12 = 3x + 9$ $7x = 21$ $x = 3$
98. $3 : x = 9 : 4$ $9x = 12$ $x = 12 \div 9$ $x = \frac{4}{3}$	99. $3.5 : 2 = 7 : x$ $3.5x = 14$ $7x = 28$ $x = 4$	100. $(x+4) : (x-1) = 8 : 3$ $8(x-1) = 3(x+4)$ $8x - 8 = 3x + 12$ $5x = 20$ $x = 4$