

方程式の計算（かけ算・割り算）

例題 等式の性質を使って次の方程式を解け。

(1) $-\frac{2}{5}x=3$

答

(2) $-6x=9$

答

練習 等式の性質を使って次の方程式を解け。

(1) $\frac{1}{4}x=3$

答

(4) $2x=14$

答

(7) $\frac{1}{3}x=6$

答

(2) $\frac{3}{2}x=-9$

答

(5) $-5x=15$

答

(8) $-7x=-21$

答

(3) $\frac{1}{4}x=20$

答

(6) $3x=-12$

答

(9) $\frac{1}{5}x=-8$

答

練習B 等式の性質を使って次の方程式を解け。

(1) $\frac{1}{3}x = -12$

答

(2) $\frac{2}{3}x = 8$

答

(3) $\frac{3}{4}x = 24$

答

(4) $-\frac{7}{3}x = 14$

答

(5) $4x = -12$

答

(6) $12x = 6$

答

(7) $3x = -2$

答

(8) $3x = -5$

答

(9) $-6x = -20$

答

(10) $-8x = 13$

答

(11) $\frac{3}{8}x = \frac{9}{40}$

答

(12) $-2x = \frac{1}{5}$

答

方程式の計算（かけ算・割り算）

例題 等式の性質を使って次の方程式を解け。

(1) $-\frac{2}{5}x=3$

★

$$-\frac{\overset{1}{\cancel{2}}}{\underset{1}{\cancel{5}}}x \times \left(-\frac{\overset{5}{\cancel{1}}}{\underset{2}{\cancel{2}}}\right) = 3 \times \left(-\frac{5}{2}\right)$$

$$x = -\frac{15}{2}$$

答 $x = -\frac{15}{2}$

(2) $-6x=9$

★

$$\frac{-\overset{1}{\cancel{6}}x}{-\overset{1}{\cancel{6}}_1} = \frac{\overset{3}{\cancel{9}}}{-\overset{1}{\cancel{3}}_2}$$

$$x = -\frac{3}{2}$$

答 $x = -\frac{3}{2}$

練習A 等式の性質を使って次の方程式を解け。

(1) $\frac{1}{4}x=3$

★

$$\frac{\overset{1}{\cancel{1}}}{\underset{1}{\cancel{4}}}x \times \overset{4}{\cancel{1}} = 3 \times 4$$

$$x = 12$$

答 $x = 12$

(4) $2x=14$

★

$$\frac{\overset{1}{\cancel{2}}x}{\underset{1}{\cancel{2}}_1} = \frac{\overset{3}{\cancel{14}}}{\underset{2}{\cancel{2}}_2}$$

$$x = 7$$

答 $x = 7$

(7) $\frac{1}{3}x=6$

★

$$\frac{\overset{1}{\cancel{1}}}{\underset{1}{\cancel{3}}}x \times \overset{3}{\cancel{1}} = 6 \times 3$$

$$x = 18$$

答 $x = 18$

(2) $\frac{3}{2}x=-9$

★

$$\frac{\overset{1}{\cancel{3}}}{\underset{1}{\cancel{2}}}x \times \frac{\overset{2}{\cancel{2}}}{\underset{3}{\cancel{3}}} = -\overset{3}{\cancel{9}} \times \frac{2}{\underset{3}{\cancel{3}}_1}$$

$$x = -6$$

答 $x = -6$

(5) $-5x=15$

★

$$\frac{-\overset{1}{\cancel{5}}x}{-\overset{1}{\cancel{5}}_1} = \frac{\overset{3}{\cancel{15}}}{-\overset{1}{\cancel{5}}_1}$$

$$x = -3$$

答 $x = -3$

(8) $-7x=-21$

★

$$\frac{-\overset{1}{\cancel{7}}x}{-\overset{1}{\cancel{7}}_1} = \frac{-\overset{3}{\cancel{21}}}{-\overset{1}{\cancel{7}}_1}$$

$$x = 3$$

答 $x = 3$

(3) $\frac{1}{4}x=20$

★

$$\frac{\overset{1}{\cancel{1}}}{\underset{1}{\cancel{4}}}x \times \overset{4}{\cancel{1}} = 20 \times 4$$

$$x = 80$$

答 $x = 80$

(6) $3x=-12$

★

$$\frac{\overset{1}{\cancel{3}}x}{\underset{1}{\cancel{3}}_1} = \frac{-\overset{4}{\cancel{12}}}{\underset{3}{\cancel{3}}_1}$$

$$x = -4$$

答 $x = -4$

(9) $\frac{1}{5}x=-8$

★

$$\frac{\overset{1}{\cancel{1}}}{\underset{1}{\cancel{5}}}x \times \overset{5}{\cancel{1}} = -8 \times 5$$

$$x = -40$$

答 $x = -40$

練習B 等式の性質を使って次の方程式を解け。

(1) $\frac{1}{3}x = -12$

★

$$\frac{1}{\cancel{3}_1} x \times \cancel{3}^1 = -12 \times 3$$

$$x = -36$$

答 $x = -36$

(2) $\frac{2}{3}x = 8$

★

$$\frac{\cancel{2}_1}{\cancel{3}_1} x \times \cancel{3}^1 = \cancel{8} \times \frac{3}{\cancel{2}_1}$$

$$x = 12$$

答 $x = 12$

(3) $\frac{3}{4}x = 24$

★

$$\frac{\cancel{3}_1}{\cancel{4}_1} x \times \cancel{4}^1 = \cancel{24} \times \frac{4}{\cancel{3}_1}$$

$$x = 32$$

答 $x = 32$

(4) $-\frac{7}{3}x = 14$

★

$$-\frac{\cancel{7}_1}{\cancel{3}_1} x \times \left(-\frac{\cancel{3}^1}{\cancel{7}_1}\right) = \cancel{14} \times \left(-\frac{3}{\cancel{7}_1}\right)$$

$$x = -6$$

答 $x = -6$

(5) $4x = -12$

★

$$\frac{\cancel{4}_1}{\cancel{4}_1} x = \frac{-\cancel{12}^3}{\cancel{4}_1}$$

$$x = -3$$

答 $x = -3$

(6) $12x = 6$

★

$$\frac{12x}{12} = \frac{6}{12}$$

$$x = \frac{1}{2}$$

答 $x = \frac{1}{2}$

(7) $3x = -2$

★

$$\frac{3x}{3} = \frac{-2}{3}$$

$$x = -\frac{2}{3}$$

答 $x = -\frac{2}{3}$

(8) $3x = -5$

★

$$\frac{3x}{3} = \frac{-5}{3}$$

$$x = -\frac{5}{3}$$

答 $x = -\frac{5}{3}$

(9) $-6x = -20$

★

$$\frac{-\cancel{6}x}{-\cancel{6}_1} = \frac{-\cancel{20}^2}{-\cancel{6}_3}$$

$$x = \frac{10}{3}$$

答 $x = \frac{10}{3}$

(10) $-8x = 13$

★

$$\frac{-\cancel{8}x}{-\cancel{8}_1} = \frac{13}{-8}$$

$$x = -\frac{13}{8}$$

答 $x = -\frac{13}{8}$

(11) $\frac{3}{8}x = \frac{9}{40}$

★

$$\frac{3}{8}x \times \frac{8}{3} = \frac{9}{40} \times \frac{8}{3}$$

$$x = -\frac{3}{5}$$

答 $x = -\frac{3}{5}$

(12) $-2x = \frac{1}{5}$

★

$$\frac{-2x}{-2} = \frac{1}{5 \times (-2)}$$

$$x = -\frac{1}{10}$$

答 $x = -\frac{1}{10}$