

数学科 方程式マスター G-④

()組()番 名前()

次の方程式を解きなさい。

$$\textcircled{1} \quad \frac{4}{5}x - 3 = \frac{3}{4}x - 2$$

$$\textcircled{5} \quad -2x - \frac{5}{3} = -\frac{4}{3}x + 2$$

$$\textcircled{2} \quad x - \frac{5}{2} = \frac{1}{7}x - 2$$

$$\textcircled{6} \quad \frac{3}{7}x + \frac{1}{7} = \frac{1}{7}x - \frac{1}{7}$$

$$\textcircled{3} \quad \frac{5}{6}x - \frac{1}{6} = -\frac{5}{2}x - \frac{1}{6}$$

$$\textcircled{7} \quad -\frac{3}{4}x + 3 = \frac{5}{6}x + 5$$

$$\textcircled{4} \quad -\frac{2}{7}x - 2 = -\frac{4}{7}x - 1$$

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次の方程式を解きなさい。

① $\frac{4}{5}x - 3 = \frac{3}{4}x - 2$

$20(\frac{4}{5}x - 3) = 20(\frac{3}{4}x - 2)$

$20 \times \frac{4}{5}x - 60 = 20 \times \frac{3}{4}x - 40$

$16x - 60 = 15x - 40$

$16x - 15x = 60 - 40$

$x = 20$

② $x - \frac{5}{2} = \frac{1}{7}x - 2$

$14(x - \frac{5}{2}) = 14(\frac{1}{7}x - 2)$

$14x + 14 \times (-\frac{5}{2}) = 14 \times \frac{1}{7}x - 28$

$14x - 35 = 2x - 28$

$14x - 2x = 35 - 28$

$12x = 7$

$12x \div 12 = 7 \div 12$

$x = \frac{7}{12} \#$

③ $\frac{5}{6}x - \frac{1}{6} = -\frac{5}{2}x - \frac{1}{6}$

$6(\frac{5}{6}x - \frac{1}{6}) = 6(-\frac{5}{2}x - \frac{1}{6})$

$6 \times \frac{5}{6}x + 6 \times (-\frac{1}{6}) = 6 \times (-\frac{5}{2}x) + 6 \times (-\frac{1}{6})$

$5x - 1 = -15x - 1$

$5x + 15x = 1 - 1$

$20x = 0$

$x = 0 \#$

④ $-\frac{2}{7}x - 2 = -\frac{4}{7}x - 1$

$7(-\frac{2}{7}x - 2) = 7(-\frac{4}{7}x - 1)$

$7 \times (-\frac{2}{7}x) - 14 = 7 \times (-\frac{4}{7}x) - 7$

$-2x - 14 = -4x - 7$

$-2x + 4x = 14 - 7$

$2x = 7$

$2x \div 2 = 7 \div 2$

$x = \frac{7}{2} \#$

⑤ $-2x - \frac{5}{3} = -\frac{4}{3}x + 2$

$3(-2x - \frac{5}{3}) = 3(-\frac{4}{3}x + 2)$

$-6x + 3 \times (-\frac{5}{3}) = 3 \times (-\frac{4}{3}x) + 6$

$-6x - 5 = -4x + 6$

$-6x + 4x = 5 + 6$

$-2x = 11$

$-2x \div (-2) = 11 \div (-2)$

$x = -\frac{11}{2} \#$

⑥ $\frac{3}{7}x + \frac{1}{7} = \frac{1}{7}x - \frac{1}{7}$

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

$7 \times \frac{3}{7}x + 7 \times \frac{1}{7} = 7 \times \frac{1}{7}x + 7 \times (-\frac{1}{7})$

$3x + 1 = x - 1$

$3x - x = -1 - 1$

$2x = -2$

$2x \div 2 = -2 \div 2$

$x = -1 \#$

⑦ $-\frac{3}{4}x + 3 = \frac{5}{6}x + 5$

$12(-\frac{3}{4}x + 3) = 12(\frac{5}{6}x + 5)$

$12 \times (-\frac{3}{4}x) + 36 = 12 \times \frac{5}{6}x + 60$

$-9x + 36 = 10x + 60$

$-9x - 10x = -36 + 60$

$-19x = 24$

$-19x \div (-19) = 24 \div (-19)$

$x = -\frac{24}{19} \#$