| 問題番号<br>07M03_K1L1_1<br>レベル<br>☆★★ | うんな進学塾<br>中１ 第３章 1次方程式<br>①～②練習問題 Level-1-1 解答 | うんな進学塾HP |
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## 1. 次の方程式を移項を利用して解きなさい。

(1) $5x + 9 = -3x + 1$

$5x + 3x = -9 + 1 \quad 8x = -8$

$x = -1$

(2) $-12x + 2 = -14 + 4x$

$-12x - 4x = -14 - 2$

$-16x = -16 \quad x = 1$

(3) $3(x - 2) = 12$

$3x - 6 = 12 \quad 3x = 12 - 6$

$3x = 18 \quad x = 6$

(4) $6(x - 1) = 3x + 9$

$6x - 6 = 3x + 9$

$6x - 3x = 9 + 6$

$3x = 15 \quad x = 5$

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

$5x - 4x = \frac{3}{2} + \frac{1}{3} \quad x = \frac{9+2}{6} = \frac{11}{6}$

(6) $0.6(x-4) = 0.3(x+5) + 1.5$

$10(0.6(x-4)) = 10(0.3(x+5) + 1.5)$

$6x - 24 = 3x + 15 + 15$

$6x - 3x = 24 + 30$

$3x = 54 \quad x = 18$

(7) $\frac{2}{3}(x-4) = \frac{5}{6}x + \frac{1}{2}$

$6\left(\frac{2}{3}(x-4)\right) = 6\left(\frac{5}{6}x + \frac{1}{2}\right)$

$4x - 16 = 5x + 3$

$5x - 4x = -16 - 3$

$x = -19$

(8) $\frac{5}{4}x - \frac{3}{2} = \frac{2}{3}x + 1$

$12\left(\frac{5}{4}x - \frac{3}{2}\right) = 12\left(\frac{2}{3}x + 1\right)$

$15x - 18 = 8x + 12$

$15x - 8x = 12 + 18 \quad 7x = 30$

$x = \frac{30}{7}$

(9) $\frac{5x-4}{6} - \frac{3x+1}{8} = \frac{x-2}{4}$

$24\left(\frac{5x-4}{6} - \frac{3x+1}{8}\right) = 24\left(\frac{x-2}{4}\right)$

$20x - 16 - 9x - 3 = 6x - 12$

$5x = 7$

$x = \frac{7}{5}$

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|---|---|---|
| (1) $x = -1$ | (2) $x = 1$ | (3) $x = 6$ |
| (4) $x = 5$ | (5) $x = \frac{11}{6}$ | (6) $x = 18$ |
| (7) $x = -19$ | (8) $x = \frac{30}{7}$ | (9) $x = \frac{7}{5}$ |

## 2. 次の問いに答えなさい。

(1) $\frac{5}{6}x + \frac{1}{2}a = \frac{3+a}{12}x + 5$ の解が$x = 12$のときの$a$の値を求めなさい。

$x = 12$を代入して解く $\frac{5}{6} \times 12 + \frac{1}{2}a = \frac{(3+a)}{12} \times 12 + 5 \quad 10 + \frac{1}{2}a = 8 + a \quad \frac{1}{2}a = 2 \quad a = 4$

(2) $\frac{7x-24}{8} = \frac{x+8}{4}$ のときの、$x^2$ の値を求めなさい。

$8 \times \left(\frac{7x-24}{8}\right) = 8 \times \left(\frac{x+8}{4}\right) \quad 7x - 24 = 2x + 16 \quad 5x = 40 \quad x = 8$ したがって、$x^2 = 64$

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| (1) $a = 4$ | (2) $x^2 = 64$ |