

数学科 方程式マスター D-②

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次の x についての方程式を解きなさい。

① $3x - (x - 17) = 5(2 - x)$

⑤ $4(x + 7) = 3(3x + 6)$

② $4x + 4(x + 3) = 14$

⑥ $4x - 6(x - 4) = 5x + 80$

③ $50x + 20(9 - x) = 270$

⑦ $3(2x + 2) + 4(x - 9) = 0$

④ $40x + 30(9 - x) = 360$

次の x についての方程式を解きなさい。

① $3x - (x - 17) = 5(2 - x)$

$$3x - x + 17 = 10 - 5x$$

$$2x + 17 = 10 - 5x$$

$$2x + 5x = 10 - 17$$

$$7x = -7$$

$$7x \div 7 = -7 \div 7$$

$$x = -1$$

② $4x + 4(x + 3) = 14$

$$4x + 4x + 12 = 14$$

$$8x + 12 = 14$$

$$8x = 14 - 12$$

$$8x = 2$$

$$8x \div 8 = 2 \div 8$$

$$x = \frac{2}{8}$$

$$x = \frac{1}{4}$$

③ $50x + 20(9 - x) = 270$

$$50x + 180 - 20x = 270$$

$$30x + 180 = 270$$

$$30x = 270 - 180$$

$$30x = 90$$

$$30x \div 30 = 90 \div 30$$

$$x = 3$$

④ $40x + 30(9 - x) = 360$

$$40x + 270 - 30x = 360$$

$$10x + 270 = 360$$

$$10x = 360 - 270$$

$$10x = 90$$

$$10x \div 10 = 90 \div 10$$

$$x = 9$$

⑤ $4(x + 7) = 3(3x + 6)$

$$4x + 28 = 9x + 18$$

$$4x - 9x = -28 + 18$$

$$-5x = -10$$

$$-5x \div (-5) = -10 \div (-5)$$

$$x = 2$$

⑥ $4x - 6(x - 4) = 5x + 80$

$$4x - 6x + 24 = 5x + 80$$

$$-2x + 24 = 5x + 80$$

$$-2x - 5x = -24 + 80$$

$$-7x = 56$$

$$-7x \div (-7) = 56 \div (-7)$$

$$x = -8$$

⑦ $3(2x + 2) + 4(x - 9) = 0$

$$6x + 6 + 4x - 36 = 0$$

$$10x - 30 = 0$$

$$10x = 30$$

$$10x \div 10 = 30 \div 10$$

$$x = 3$$