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Multi-Step Equations with like terms on both sides without distributive property

Look at x term the opposite of the smallest to both sides

1. $5x = 3x - 8$

$-3x \quad -3x$

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

$x = -4$

2. $6x = 4x - 12$

3) $7x - 2 = 5x + 10$

$-5x \quad -5x$

$2x - 2 = 10$

$+2 \quad +2$

$\frac{2x}{2} = \frac{12}{2}$

$x = 6$

4) $-7x + 15 = -3 + 2x$

5) $3x - 21 = -2x + 9$

$+2x \quad +2x$

$5x - 21 = 9$

$+21 \quad +21$

$\frac{5x}{5} = \frac{30}{5}$

$x = 6$

6) $2x - 9 = -3x + 6$

7) $-23 + 2x = -3x + 7$

$+3x \quad +3x$

$-23 + 5x = 7$

$+23 \quad +23$

$\frac{5x}{5} = \frac{30}{5}$

$x = 6$

8) $-6 + 2x = 3 - x$

$-23 + 2x = -3x + 7$

$+23 \quad +23$

$2x = -3x + 30$

$+3x \quad +3x$

$\frac{5x}{5} = \frac{30}{5}$

$x = 6$

Multi-Step Equations with like terms on both sides with distributive property	1. $2(x-5)=3x+1$ $2x-10=3x+1$ $-2x \qquad -2x$ $-10=x+1$ $-1 \qquad -1$ $\boxed{-11=x}$ 2. $5(x+3)=2x-9$ 1. $4(x+3)=2(x-6)$ $4x+12=2x-12$ $-2x \qquad -2x$ $2x+12=-12$ $-12 \qquad -12$ $\frac{2x}{2}=\frac{-24}{2}$ $x=-12$ 2. $3(x+2)=4(x-10)$ 3. $-9(x-4)=-(x+20)$