Linear Equations; ax + b = c

Strategy

Use the Order of Operations in reverse using the inverse (opposite) operation to isolate the variable.

Order of Operations

1. Grouping 2. Exponentials
3. Multiply/Divide
4. Addition/Subtraction from left to right **Example:** Solve 5x - 2 = 18 $5x \frac{+2 + 2}{= 20}$ = 4 X Solve the following equations. 1. 3x + 4 = 192. 4x - 2 = 183. 5x + 6 = 364. 7x - 6 = 226. 5x + 3 = -275. 6x - 5 = 377. -4x + 7 = -258. -30 = 4x + 29. 3 = 5x + 3810. 4x + 3 = 111. $\frac{x}{2} + 6 = 10$ 12. $\frac{y}{4} - 3 = 7$