Linear Equations; $\quad \mathbf{a x}+\mathbf{b}=\mathbf{c}$

## Strategy

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

Order of Operations
$\uparrow$ 1. Grouping
2. Exponentials
3. Multiply/Divide
4. Addition/Subtraction
from left to right

Example: Solve

$$
\begin{array}{r}
5 x-2=18 \\
+2+2 \\
5 x \\
x \quad=40
\end{array}
$$

Solve the following equations.

1. $3 x+4=19$
2. $4 x-2=18$
3. $5 x+6=36$
4. $7 \mathrm{x}-6=22$
5. $6 x-5=37$
6. $5 x+3=-27$
7. $-4 \mathrm{x}+7=-25$
8. $-30=4 \mathrm{x}+2$
9. $3=5 x+38$
10. $4 \mathrm{x}+3=1$
11. $\frac{x}{2}+6=10$
12. $\frac{y}{4}-3=7$
