

Solving Equations by Collecting Like Terms

Solve for x : $4x + 4 = 16 - 2x$

Subtract 4 from each side: $4x + 4 - 4 = 16 - 4 - 2x$

$$4x = 12 - 2x$$

Add $2x$ to each side: $4x + 2x = 12 - 2x + 2x$

$$6x = 12$$

Divide each side by 6: $\frac{6x}{6} = \frac{12}{6}$

$$x = 2$$

a) $5x - 7 = 2x + 8$

b) $4x + 4 = 10 - 2x$

c) $4x + 4 = 10 - 2x$