

Solving Equations

1. Solve each equation.

$$a) x + 5 = 9$$

$$b) x - 5 = 9$$

$$c) x - 5 = -9$$

$$d) -x + 5 = 7$$

$$e) -3 - x = 10$$

$$f) -1 - x = -3$$

$$g) 7 - 2x = 8$$

$$h) -3 - 4x = 5$$

$$i) -4 - 3x = -1$$

2. Solve each equation.

a) $\frac{4}{3}x = \frac{1}{2}$

b) $\frac{5}{2}x = 4$

c) $\frac{3}{8}x = \frac{3}{4}$

d) $\frac{7}{5}x = 3$

Solving Equations

1. Solve each equation.

$$\begin{array}{r} a) \quad x + 5 = 9 \\ \quad \quad \cancel{-5} \quad \cancel{-5} \\ \hline \boxed{x = 4} \end{array}$$

$$\begin{array}{r} b) \quad x - 5 = 9 \\ \quad \quad \cancel{+5} \quad \cancel{+5} \\ \hline \boxed{x = 14} \end{array}$$

$$\begin{array}{r} c) \quad x - 5 = -9 \\ \quad \quad \cancel{+5} \quad \cancel{+5} \\ \hline \boxed{x = -4} \end{array}$$

$$\begin{array}{r} d) \quad -x + 5 = 7 \\ \quad \quad \cancel{+5} \quad \cancel{-5} \\ \hline \frac{-x}{-1} = \frac{2}{-1} \\ \hline \boxed{x = -2} \end{array}$$

$$\begin{array}{r} e) \quad -3 - x = 10 \\ \quad \quad \cancel{+3} \quad \quad \quad \cancel{+3} \\ \hline \frac{-x}{-1} = \frac{13}{-1} \\ \hline \boxed{x = -13} \end{array}$$

$$\begin{array}{r} f) \quad -1 - x = -3 \\ \quad \quad \cancel{+1} \quad \quad \quad \cancel{+1} \\ \hline \frac{-x}{-1} = \frac{-2}{-1} \\ \hline \boxed{x = 2} \end{array}$$

$$\begin{array}{r} g) \quad 7 - 2x = 8 \\ \quad \quad \cancel{-7} \quad \quad \quad \cancel{-7} \\ \hline \frac{-2x}{-2} = \frac{1}{-2} \\ \hline \boxed{x = -\frac{1}{2}} \end{array}$$

$$\begin{array}{r} h) \quad -3 - 4x = 5 \\ \quad \quad \cancel{+3} \quad \quad \quad \cancel{+3} \\ \hline \frac{-4x}{-4} = \frac{8}{-4} \\ \hline \boxed{x = -2} \end{array}$$

$$\begin{array}{r} i) \quad -4 - 3x = -1 \\ \quad \quad \cancel{+4} \quad \quad \quad \cancel{+4} \\ \hline \frac{-3x}{-3} = \frac{3}{-3} \\ \hline \boxed{x = -1} \end{array}$$

2. Solve each equation.

a) $\frac{4}{3}x = \frac{1}{2}$

Reciprocal Method!

$$\frac{3}{4}\left(\frac{4}{3}x\right) = \frac{3}{4}\left(\frac{1}{2}\right)$$

$$x = \frac{3}{8}$$

b) $\frac{5}{2}x = 4$

Reciprocal Method!

$$\frac{2}{5}\left(\frac{5}{2}x\right) = \frac{2}{5}\left(\frac{4}{1}\right)$$

$$x = \frac{8}{5}$$

c) $\frac{3}{8}x = \frac{3}{4}$ LCD=8 d) $\frac{7}{5}x = 3$ LCD=5

$$8\left(\frac{3}{8}x\right) = 8\left(\frac{3}{4}\right)$$

$$\frac{3x}{3} = \frac{6}{3}$$

$$x = 2$$

$$5\left(\frac{7}{5}x\right) = 5(3)$$

$$\frac{7x}{7} = \frac{15}{7}$$

$$x = \frac{15}{7}$$



1. Solve each equation.

a) $x + 5 = 9$

~~$x + 5 = 9$~~
 ~~$x = 4$~~

$+5$
 $+5$

 $+10$

-2

b) $2x - 5 = -9$

~~$2x - 5 = -9$~~
 ~~$2x = 4$~~
 ~~$x = 2$~~

-5
 -5

 -10

-2

c) $-2x - 3 = -4$

$x = \frac{1}{2}$

SHAZZAM!
I don't think so!!
No shazzam in on
quizzes or exams!!
Show your work!
 -5