

Equation

Unit 6.1

Solving Equations Part I

1. Solve for x as shown below.

Example: $5 + x = 8$ or, $x = 8 - 5 = 3$	$5 - x = 8$ or, $x = 5 - 8 = -3$	$5 \times x = 10$ or, $x = \frac{10}{5} = 2$	$\frac{x}{5} = 10$ or, $x = 5 \times 10 = 50$
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a. $4 + x = 7$

l. $3 \times x = -6$

b. $4 - x = 7$

m. $x \times \frac{1}{5} = 2$

c. $x + 5 = -7$

n. $x \times \frac{1}{2} = 4$

d. $x + 1 = -4$

o. $\frac{x}{4} = -3$

e. $x + 5 = 2$

p. $\frac{2}{7} \times x = \frac{8}{21}$

f. $x - 2.3 = -2.3$

q. $\frac{1}{5} x = -4$

g. $x + 3 = 0$

r. $5x = -4$

h. $x - 3 = 8$

s. $\frac{1}{2} x = -1$

i. $6 = x + 7$

t. $2x = 0$

j. $x - 1 = -5$

u. $-3 = -9x$

k. $x - 3 = -2$

v. $\frac{-x}{7} = 1$

2. Solve for x as shown below.

Example:

i. $x + 7.4 = 6.2$ or, $x = 6.2 - 7.4 = -1.2$	ii. $-\frac{2}{5} + x = -\frac{4}{5}$ or, $x = -\frac{4}{5} + \frac{2}{5} = -\frac{2}{5}$
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Note: In equation, equal quantity can be added to both sides or subtracted from both sides. i.e. $x + 7.4 - 7.4 = 6.2 - 7.4$ and $-\frac{2}{5} + \frac{2}{5} + x = -\frac{4}{5} + \frac{2}{5}$.

a. $x + 3 = -7$
 or, $x = -7 - \square$
 $\therefore x =$

h. $x + \frac{3}{7} = \frac{3}{7}$

b. $x + 5.2 = 2.5$

i. $x + \frac{4}{5} = \frac{7}{5}$

c. $x + 6.6 = 8$

j. $x - \frac{1}{4} = \frac{3}{4}$

d. $x - 6.1 = -7.2$

k. $x + \frac{1}{3} = -\frac{1}{4}$

e. $x - 9 = -9$

l. $-1 + x = \frac{2}{3}$

f. $x - 2.8 = 0.8$

m. $4.7 + x = 0$

g. $x - 17 = 25$

n. $x + \frac{5}{12} = \frac{1}{4}$