

Equation

Unit 7.1

More Problems on Solving Equations Part I

1. Solve for x . Write either '+' or '-' in the boxes if necessary.

Example: $-7x + 2 = -3x + 6$

or, $-7x + 3x = 6 - 2$ (Adding $3x$ and subtracting 2 from both sides.)

or, $-4x = 4$

$\therefore x = -1$

Note that you can change the sign of the term which needs to be deleted and transpose the term to the other side.)

a. $2x + 5 = 3x + 3$

or, $2x \square 3x = 3 \square 5$

e. $-4x + 9 = -5x - 2$

b. $-2x + 5 = -3x - 3$

or, $-2x \square 3x = -3 \square 5$

f. $-4x - 9 = 5x + 2$

c. $-2x - 5 = 3x + 3$

or, $-2x \square 3x = 3 \square 5$

g. $-4x + 9 = 5x - 2$

d. $-2x - 5 = -3x - 3$

or, $-2x \square 3x = -3 \square 5$

h. $-4x - 9 = -5x - 2$

2. Solve for x.

a. $3x - 2 = x - 6$

f. $2x + 7 + 5x = 0$

b. $-20x + 80 = -5x + 20$

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

c. $5x - 4 = x$

h. $6 - 5x + 9x + 10 = 0$

d. $11x - 18 = 2x + 9$

i. $\frac{x}{3} - \frac{7}{2} = -2$

e. $15 = 5 - x$

j. $\frac{5}{6}x + \frac{2}{5} = 1$