

8.1  
MARCH 3

## Solving Linear Equations

Concept/ Key Terms	Example	Explanation/Rules
Equation	$ax + b = c$	expression on both sides of equals are true. When value is substituted for variable it is true.
	EX 1) $x + 3 = 9$	$x = 6$ is the solution because $(6) + 3 = 9$ $9 = 9 \checkmark$
Addition Principle	$A = B$ $A + C = A + B$	Adding the same number to both sides makes equivalent equations.
	EX 2) $x - 4 = 12$ $x - 4 + 4 = 12 + 4$ $x = 16$	Use this to solve an equation ADD +4 to both sides to solve (opp of -4)
	$x - 4 = 12$ $(16) - 4 \stackrel{?}{=} 12$ $12 = 12 \checkmark$	check solution

### SUMMARY

ADD THE OPPOSITE OF THE CONSTANT THAT IS WITH THE VARIABLE TO BOTH SIDES TO SOLVE THE EQUATION.