## In Class Practice Solving One Step Equations Using Addition/Subtraction/Multiplication/Division

Addition Property of Equality – you can add the same amount to both sides of an equation and the statement will still be true.

Subtraction Property of Equality – you can subtract the same amount from both sides of an equation and the statement will still be true.

Multiplication/Division Properties of Equality – you can multiply or divide both sides of an equation by the same number and the statement will still be true.

Inverse Operations – Operations that "undo" each other.

To solve an equation means to find a solution to the equation. That means finding the value of the variable that makes the statement true. To do this, it is necessary to isolate the variable. This can be done by using inverse operations.

**STEPS ISOLATE** – Use inverse operations

BALANCE - Do the same operation on both sides of the equal sign

SOLVE – What remains should be the solution to the equation

**CHECK** – Put your solution into the equation in place of the variable to see if it is correct.

1. $x + 8 = 17$	2. $11 = x - 5$	3. $12.5 \text{ x} = 250$	4. $\frac{t}{16} = 8$
Ι	Ι	Ι	I
В	В	В	В
S	S	S	S
С	С	С	С
			t
5. $a + 5 = 11$	6. $21 = c - 15$	7. $7b = 28$	$8.\frac{1}{14} = 4$
Ι	Ι	Ι	Ι
В	В	В	В
S	S	S	S
С	С	С	С

9. 
$$x + 4 = 12$$
 10.  $a + 6 = 24 + 9$  11.  $y - 5 = 18$ 

12. 
$$z - (5 + 3) = 50$$
 13.  $z + (-4 - 2) = 12$  14.  $15a = 75$ 

15. 
$$-3y = 45$$
 16.  $\frac{p}{9} = 9$ 

17. 
$$\frac{a}{12} = -3$$

18. A shark can swim at an average speed of 25 mph. At this rate, how far can a shark swim in 2.4 hours? Use  $r = \frac{d}{t}$