Solving One-Step EQUATIONS – Addition/Subtraction

- An equation is a math sentence that **DOES** contain an ______.
- The goal of solving an equation is to **find the value of the variable.**
 - We do this by **isolating** the variable on one side of the equation using **Inverse Operations!**
 - Inverse operations "undo" each other!

Inverse of addition?

Inverse of subtraction?

Inverse of multiplication?

Inverse of division?

Examples:

John has x apples. If he adds 5 apples to his pile, he will have 8 apples.
What is the value of x?

Maddie has x dollars. After spending \$90 on a purse, she will have \$45. What is the value of x?

Write an equation: x + 5 = 8 -5 = -5

Write an equation: x - 90 = 45+ 90 = +90x = 135

<u>Answer</u>: John had 3 apples before he added to his pile.

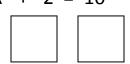
<u>Answer</u>: Maddie had \$135 before she bought the purse.

Check:

Check: 135 - 90 = 45

Let's Practice!

1.
$$x + 2 = 10$$



2.
$$y - 8 = 15$$



3.
$$a + 9 = 2$$



Math 6 Practice (8.1)

Solve

1)
$$x + 7 = 18$$

2)
$$a - 15 = 22$$

1)
$$x + 7 = 18$$
 2) $a - 15 = 22$ 3) $83 = y - 17$

4)
$$c-3=6$$

5)
$$x + 8 = 18$$

6)
$$y - 5 = 4$$

7)
$$6 + z = 10$$

8)
$$p-5=15$$

9)
$$4 + m = 12$$

10)
$$g + 44 = 50$$

11)
$$x - 9 = 2$$

12)
$$a + 10 = 17$$

13)
$$y - 4 = 19$$

14)
$$b-17=12$$

15)
$$3 = d + 2$$

16)
$$i + 13 = 27$$

17)
$$y - 4 = 6$$

18)
$$x + 5 = 8$$

19)
$$x - 4 = 9$$

20)
$$24 = n + 13$$
 21) $d - 9 = 11$

21)
$$d-9=11$$