

## SOLVING EQUATIONS WITH VARIABLES ON BOTH SIDES – DAY 1



1. Brittany sold 5 more candy bars than Ashley. Tyler sold twice as many candy bars as Brittany. If there were 39 candy bars sold by Ashley, Brittany and Tyler, which equation below would represent this relationship?

a)  $4 + a = 39$

b)  $4a + 15 = 39$

c)  $2a = 39$

d)  $4a + 10 = 39$

2. The equation  $F = \frac{9}{5}C + 32$  changes Celsius temperature to Fahrenheit temperature. If the Fahrenheit temperature is  $-31^\circ$ , what is the Celsius temperature?

a)  $-35^\circ$

b)  $1.1^\circ$

c)  $-113.4^\circ$

d)  $14.8^\circ$

**EXAMPLES:** Solve each equation showing all steps. Check the solutions on the calculator.

1)  $6k - 3 = 2k + 13$

2)  $8 - 0.2p = 0.4p - 10$

3)  $8c + 1 = 7c - 14 - 2c$

4)  $5 - 7(t + 1) = -10t + 3$

5)  $\frac{6}{m+9} = \frac{3}{m+15}$

6) Rachel and Amanda are planting tulip bulbs. Rachel has planted 45 bulbs and is planting at a rate of 30 bulbs per hour. Amanda is planting at a rate of 36 bulbs per hour and has planted 27 bulbs. How long will it take Rachel and Amanda to plant the same number of bulbs? How many bulbs will that be?

Equation: \_\_\_\_\_