

Solutions and Everything Else *Multiply by 2*

You have two numbers. If you double the first number and add it to the second number, the sum is 10.

- Let  $x$  represent the first number and  $y$  represent the second number. Write an equation showing the relationship between  $x$ ,  $y$ , and 10.

*1st = x  
2nd = y*

$$2x + y = 10$$

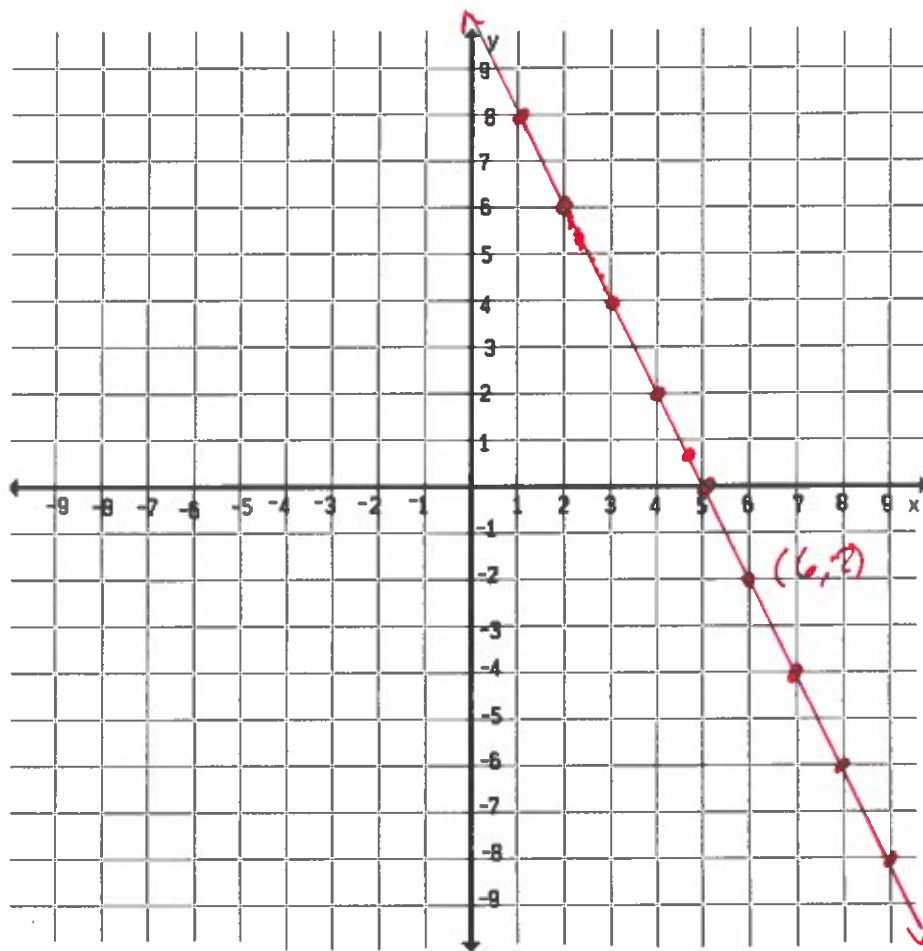
- Create a list of at least 5 combinations of  $x$  and  $y$  values that make your equation true. (Meaning you could plug them into your equation and get the solution of 10).

*Slope:  $\frac{y}{x}$*

*(4, 2)*  $x=4$   $2(4)+2=10$   $8+2=10$   $(1, 8)$   $x=1$   $2(1)+8=10$   $2+8=10$   $(2, 6)$   $x=2$   $2(2)+6=10$   $4+6=10$

*(3, 4)*  $x=3$   $2(3)+4=10$   $6+4=10$   $(5, 0)$   $x=5$   $2(5)+0=10$   $10+0=10$

- Plot your five  $(x, y)$  points from question #2 on the coordinate plane. What do you notice about the points you have plotted?



*$2(6) + -2$   
 $12 + -2 = 10$*

*$2(9) + -8$   
 $18 + -8 = 10$*

*(9, -8)*