

**Write the mathematic expression, equation, or inequality.**

1) The sum of 19 and twice of x  
 $19 + 2x$

2) The product of 3 and y is no less than 21  
 $3y \geq 21$

3) The quotient of w and the difference of 5 and d is equal to 10  
 $\frac{w}{5-d} = 10$

3.5) 5 more than x is less than y  
 $x + 5 < y$

**Check whether the given value is a solution**

4)  $2 + 3x = 10$ ;  $x = 2$   
**NO**

5)  $8 + 3b > 15$ ;  $b = 2$   
**NO**

6)  $11y - 5 \leq 30$ ;  $y = 3$   
**YES**

**Make tables for these equations using the inputs -2, 0, 4 and 7**

7)  $y = 1 - x^2$

x	y
-2	$1 - (-2)^2 = 1 - 4 = -3$
0	$1 - 0^2 = 1 - 0 = 1$
4	$1 - 4^2 = 1 - 16 = -15$
7	$1 - 7^2 = 1 - 49 = -48$

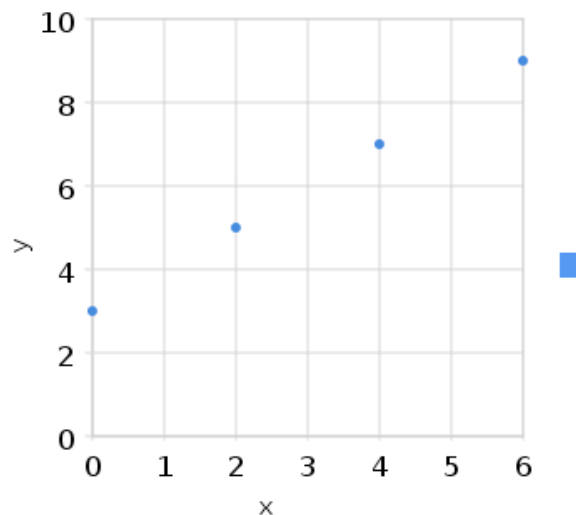
8)  $y = \frac{x+1}{x-2}$

x	y
-2	$\frac{(-2)+1}{(-2)-2} = \frac{-1}{-4} = \frac{1}{4}$
0	$\frac{0+1}{0-2} = \frac{1}{-2} = -\frac{1}{2}$
4	$\frac{4+1}{4-2} = \frac{5}{2}$
7	$\frac{7+1}{7-2} = \frac{8}{5}$

**Make a SCATTER PLOT graph for this equation by finishing the table first. Make sure you label your axes and show your units.**

9)  $y = x + 3$

x	y
0	3
2	5
4	7
6	9



Evaluate the following expressions. **SHOW YOUR WORK!**

10)  $7 + 3^2 \cdot 2$

**25**

11)  $(5^2 + 17) \div 7$

**6**

12)  $(24 - 11) - (3 + 5) \div 4$

**11**

13)  $\frac{x}{5}$  when  $x = 30$

**6**

14)  $n^3$  when  $n = 20$

**8000**

15)  $-15 - t$  when  $t = -11$

**-4**

16)  $12 + 4x$  when  $x = \frac{3}{2}$

**18**

17)  $3z^2 - 7$  when  $z = 6$

**101**

18)  $2(4n + 5)$  when  $n = 2$

**26**

19)  $|x - 5| - 4$  when  $x = 3$

**-2**

20)  $8 - (x + 2)^2$  when  $x = -5$

**-1**

21)  $\frac{1 - x + 5}{6}$  when  $x = 4$

**$\frac{1}{3}$**