

# MasterMath

6th Grade Quarter 4 Exam

Name \_\_\_\_\_

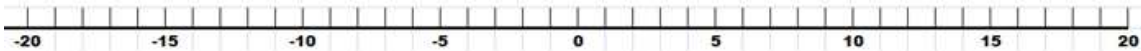
Date \_\_\_\_\_

**Closed Book; 60 minutes to complete**  
**CUCC; You may use a calculator.**

1. Solve this inequality:  $3x + 12 > 15$

2. Solve this inequality:  $6 - 5x + 2x \leq 24$

3. Solve this inequality, and then graph your solution:  $5x < 15$



4. Write an Inequality to describe this sentence, and then solve the Inequality: 125 is no less than 5 times a number z

5. Create an Input-Output Table for this function. Use -3, -2, -1, 0, 1, 2, 3 as your domain.

$y = 4x - 20$

x	y

6. Write an equation for the function shown by the table.

x	y	
-1	-7	
0	-6	
1	-5	
2	-4	
3	-3	

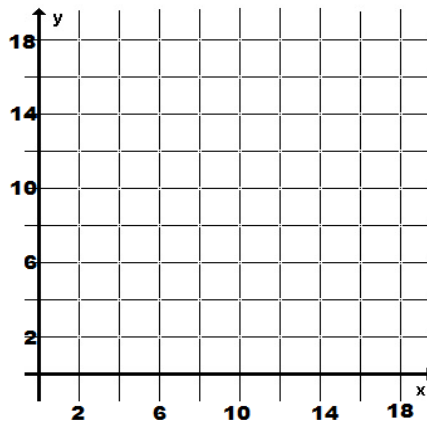
7. The output minus 3 is equal to half the input. Write a function to describe this relationship; then create an Input-Output Table to represent the relationship for a domain of -2, -1, 0, 1, and 2.

x	y	

8. Graph this data. Does the graph represent a linear function?

Write an equation for the function.

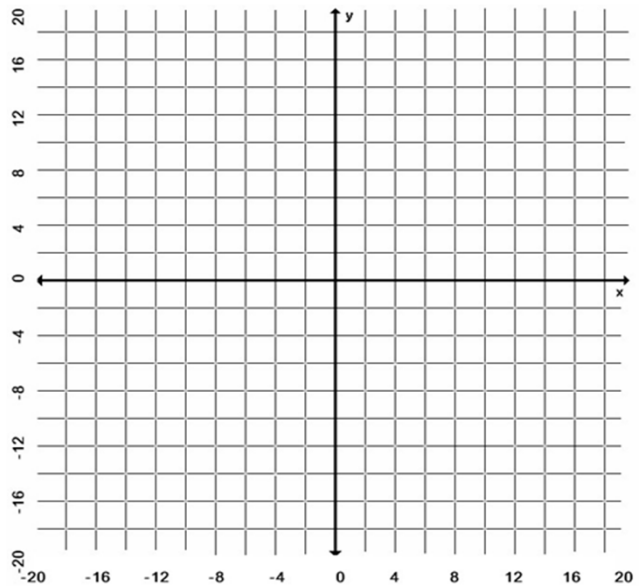
x	y
0	5
1	7
2	9
3	11
4	13



linear?	equation?

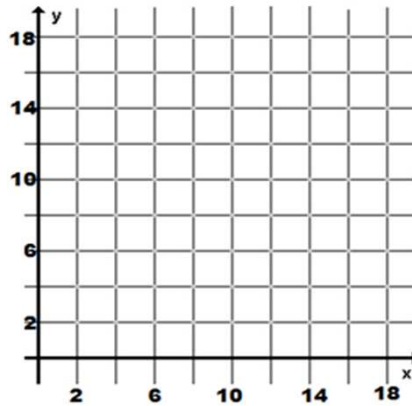
9. Graph this function:  $y = \frac{1}{2}x - 6$

x	y



10. The formula for the perimeter of a square is four times the length of a side. Create a table, a graph, and an equation for this relationship.

x	y



equation?

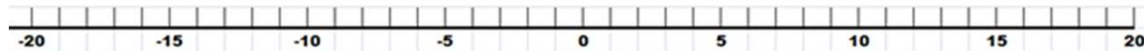
11. Write this equation in function form:  $3x + y = 16$

12. Find the solution set for this function if  $x = 3$ :  $y = 2x - 5$

13. Write a function that describes this situation: The input plus three equals half the output.

14. Create an inequality to accurately describe these situation, and draw it on the number line:

**"You need to be at least 16 years old to get a driving learner's permit in most states."**

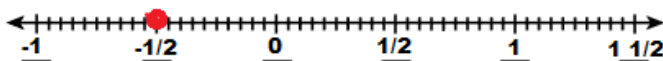


15. Solve this Inequality:  $1.8 + x < 2.6 - 5.5$

16. Solve this Inequality:  $\frac{3}{4}x + \frac{1}{2} > 1$

17. Solve this Inequality:  $x - 16 < 18 - 12$

18. What is the Absolute Value of the number represented on this number line?



19. What Quadrant is this point in:  $(-3, 4)$

20. If Point 1 is in Quadrant 3, and Point 2 is in Quadrant 4, which point has an x with the higher value?