

MasterMath

Algebra 1 Quarter 2 Assessment

Name _____

Date _____

Closed Book; 45 minutes to complete

CUCC; You may use a calculator.

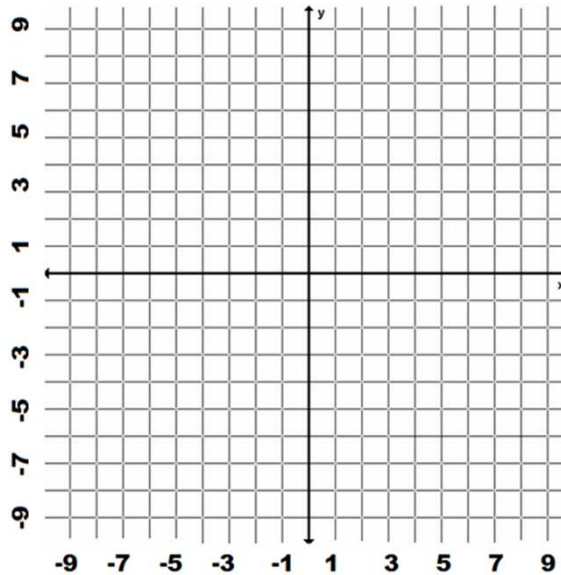
1. A point is 3 units to the right of the origin, and 11 units down from the origin. What are the coordinates of the point?

2. Plot and label these points:

A: (4, 6)

B: (-3, -5)

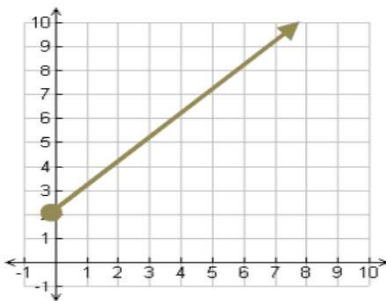
C: (8, -7)



3. Does point (3, 3) fall on the line for the equation $y = 3x - 6$?

4. The coordinates of Point A are (-4, -6). If Point A is translated 3 units up, what are its new coordinates?

5. What is the domain and range of the function graphed below?

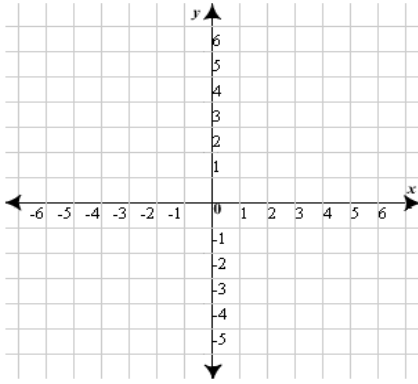


domain	
range	

6. Joe had a summer job that pays \$7.00 an hour and he worked between 15 and 35 hours every week. His weekly salary can be modeled by the equation: $S = 7h$, where S is his weekly salary and h is the number of hours he worked in a week. Last week he worked 22.66 hours. Answer the questions below:

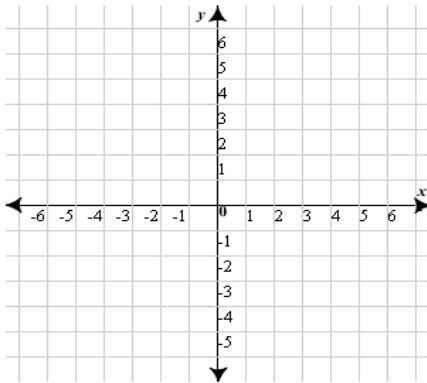
Domain	
Range	
Continuous or Discrete	

7. Complete the table and then graph $y = 2x - 3$



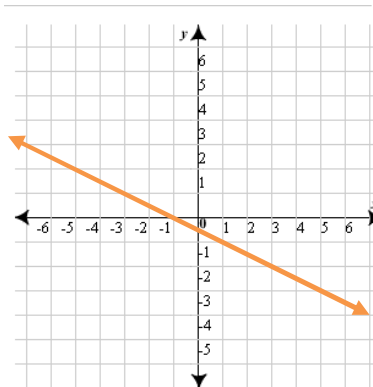
x	y

8. Find the x and y intercepts and use them to graph this equation: $2x - 3y = 6$



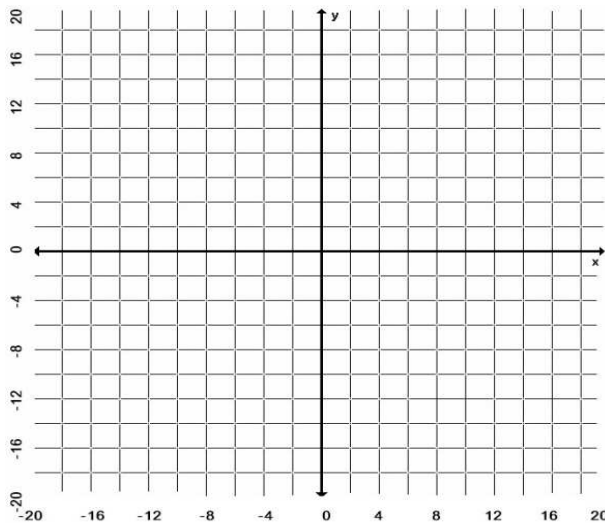
x Intercept	
y Intercept	

9. What is the slope of this line?

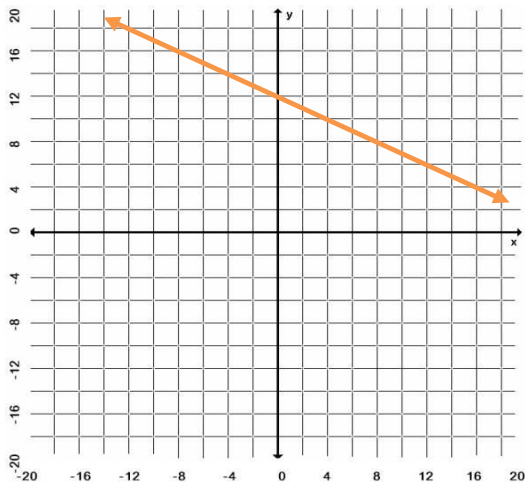


10. What is the slope of a line that passes through these two points:
(3, 5) and (-2, 10)

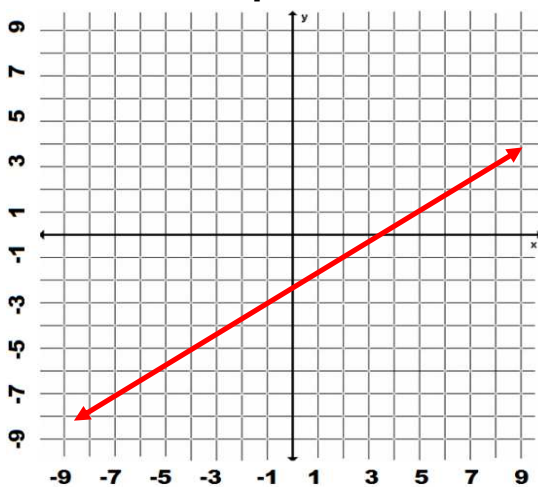
11. Convert this equation to Slope-Intercept Form and then graph: $4x - y = 6$



12. What is the equation in Slope-Intercept Form for the line graphed here?



13. Does this line represent Direct Variation. Explain your answer.



14. Evaluate this function for $x = -3$.

$$f(x) = 2x - 4$$

15. Create an equation in Function Form that describes the relationship between x and y shown here. Is it a Direct Variation?

x	-2	-1	0	1	2
y	-8	-4	0	4	8

16. Find the equation in Slope-Intercept Form for a line that includes these points: (6, 4) and (0, 2).

17. A line has a slope of -6 and includes the point (-2, 8). What is the equation for this relationship?

18. A linear function f includes these values: $f(5) = 10$; $f(0) = -10$. Write an equation for this function.

19. The cost of shipping a package to Bangkok, Thailand is \$20 plus an additional charge for each ounce that the package weighs. It costs you \$53 to send your 11 oz. package to Bangkok. What is the charge per ounce?



20. What is the equation of the red line above in Point-Slope Form? Use

21. What is the equation of the blue line in Standard Form?

22. What is the equation of the green line above in Point-Slope Form?

23. Write an equation in Point-Slope Form for a line that passes through (4, 2) and (6, 6). Use (6, 6) as your point.

24. Place an "x" in the box on the right that identifies the form of each of these equations:

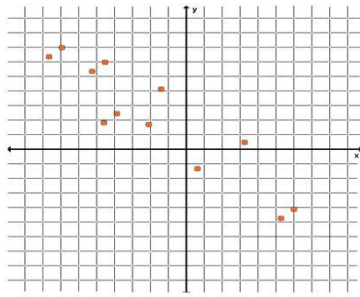
Equation	Slope-	Standard	Point-
$3x - 6y = -12$			
$y = 3x - 12$			
$y = 2(x - 4)$			

25. Are these lines parallel or perpendicular: $6x - 2y = -6$; $x + 3y = 9$

26. Write an equation for a line that is parallel to $y = 4 - x$, and passes through (1, -3)

27. Find the slope of a line that is perpendicular to a line that passes through the points (3, 7) and (-2, -3).

28. Describe the relationship between the x and y variables shown on this scatter



29.

The green line best-fits the data plotted on this graph. If we were to use this line to predict the value of y when $x = 25$, what type of prediction would this be?

