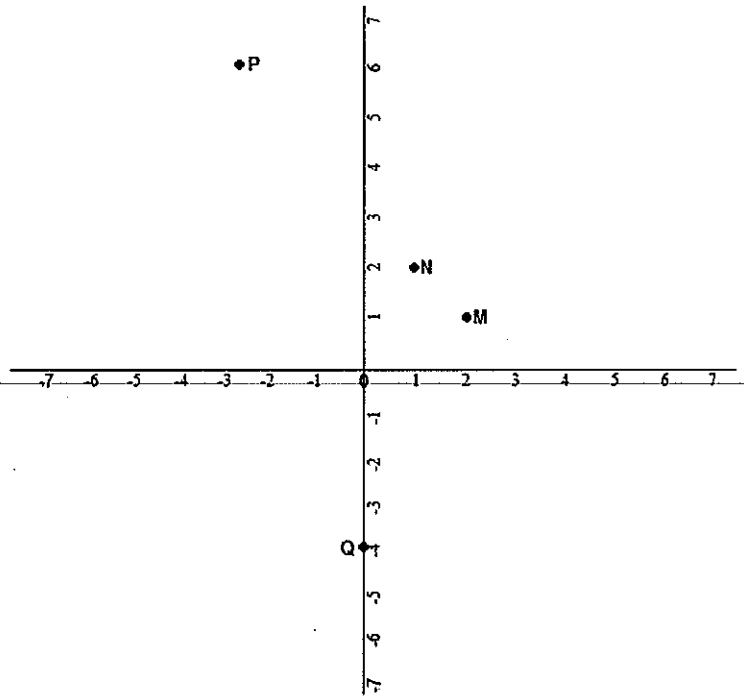
Algebra Practice Test #2



Write the ordered pair for each point.

1. P $(-3, 6)$
2. Q $(0, -4)$
3. N $(1, 2)$
4. M $(2, 1)$

Name the quadrant or axis where each point is located.

5. (6, 10) I
6. (-4, 8) II
7. (-3,-2) III
8. (0, -12) y-axis

Write a table of values for the relation.

9. { (-1, 0), (0, 0), (2, 3), (4, 1) }

x	y
-1	0
0	0
2	3
4	1

Determine the domain and range of the relation.

10. $\left\{\left(\frac{-1}{2}, 3\right), (1, 2), \left(\frac{1}{2}, 4\right)\right\}$

Domain: $\left\{-\frac{1}{2}, 1, \frac{1}{2}\right\}$

Range: $\{2, 3, 4\}$

Make a table of values for the domain {-2, -1, 0, 1, 2}.

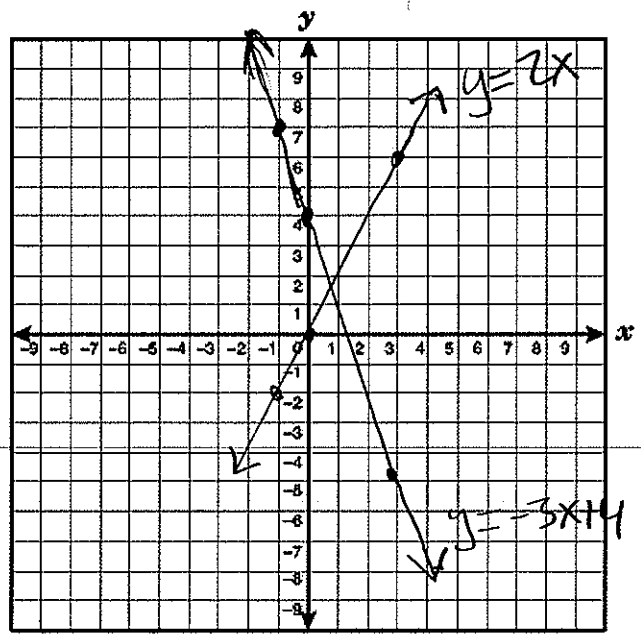
11. $y = 4 - 3x$

x	4 - 3x	y
-2	4 - 3(-2)	10
-1	4 - 3(-1)	7
0	4 - 3(0)	4
1	4 - 3(1)	1
2	4 - 3(2)	-2

Graph each function on the coordinate plane.
Use the domain {-1, 0, 3}

12. $y = 2x$

x	2x	y
-1	2(-1)	-2
0	2(0)	0
3	2(3)	6



13. $y = -3x + 4$

x	-3x+4	y
-1	-3(-1)+4	7
0	-3(0)+4	4
3	-3(3)+4	-5

Is the relation a function? If not, cross out one ordered pair to make a function.

14. { (-2, 6), (3, -2), (3, 0), (4, 6) } NO

15. {(0,9), (1,9), (2,9), (3,9) yes

16. { (-1, 0), (3, 0), (6, 2) } yes

If $f(x) = -3x - 6$, find each value.

17. $f(2)$ $F(2) = -3(2) - 6$
$F(2) = -12$

18. $f(-5)$ $F(-5) = -3(-5) - 6$
$F(-5) = 9$

19. Write an equation of the direct variation that includes the point (-5, 10)

$y = Kx$ $10 = K(-5)$
$-2 = K$
$y = -2x$

20. Emilio earns $11.50 an hour painting houses.

a. Write a rule to describe how the amount of money ***m*** earned is a function of the number of hours ***h*** spent painting houses. $m = \$11.50h$

b. How many hours does Emilio need to work to earn $120.75?

$\$120.75 = \$11.50h$
$10.5 \text{ hours} = h$