

Name:

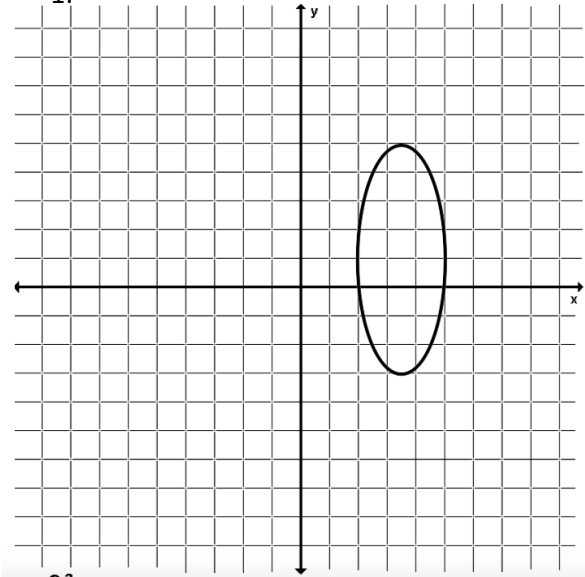
Date:

Hour:

Algebra 1  
WS PC #1 Review – Unit 2

Find the domain and range and determine if it is a function. Support your answer.

1.

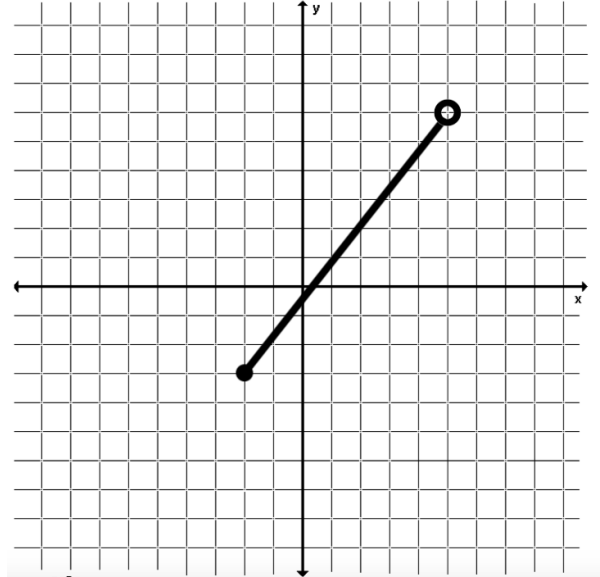


D:

R:

Function?: Y or N

2.



D:

R:

Function?: Y or N

3.

x	-3	4	0	4
y	1	2	3	5

D:

R:

Function?: Y or N

4.

x	2	1	0	-1
y	4	7	7	4

D:

R:

Function?: Y or N

5. Create a mapping diagram for the following points and determine if it is a function. Support your answer.

$\{(-6, 8), (-2, 9), (0, 10), (-2, 11), (-5, 12)\}$

Given  $f(x) = 8 - 3x$  and  $g(x) = 5 + 2x^2$ , find the following:

6.  $f(-10)$

7.  $g(-1)$

8.  $f(0) - g(2)$

9.  $3g(7)$

10.  $g(-5) + f(5)$

11.  $\frac{f(-4)}{5}$

Write the function and solve for the given information.

12. A personal trainer charges a set-up fee of \$50 for new customers plus a fee for each hour. If it cost \$230 for 12 hours of training, what is the fee for each hour?

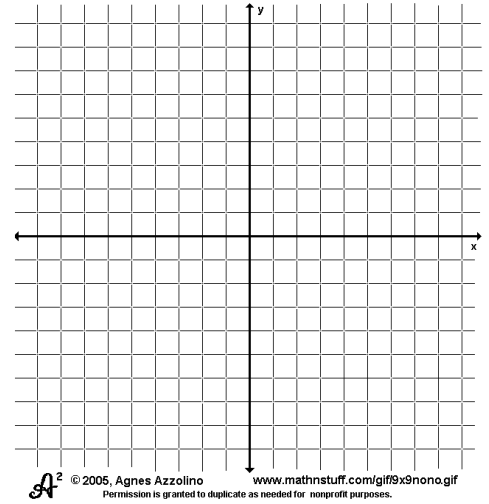
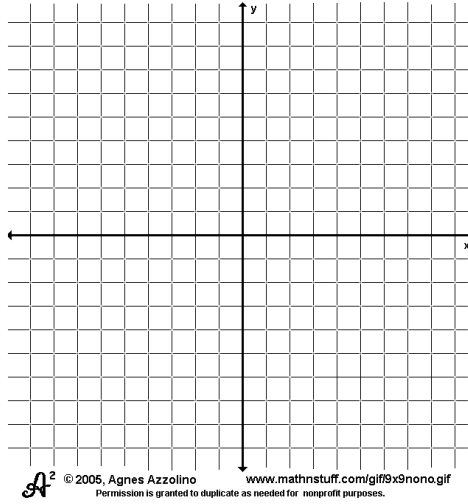
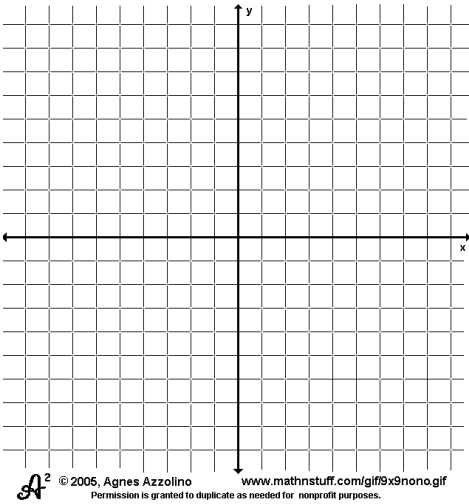
13. Mrs. Roberts is going to get senior pictures taken of her daughter. She finds a photographer who charges \$120 for the sitting fee and \$15 for each pose. Write a function to represent the total cost of the pictures for  $x$  poses. If Mrs. Roberts paid \$195 to the photographer, how many poses did they use?

Find the x- and y-intercepts of each function. Write the intercepts as an ordered pair. Then graph.

14.  $3x - 2y = 12$

15.  $-6x - 8y = 16$

16.  $9y + 3x = 9$



17. Solve each equation for y.

a.  $5x - 3y = -15$

b.  $y - 3 = 2(x - 4)$

c.  $\frac{1}{2}x - 3y = 12$

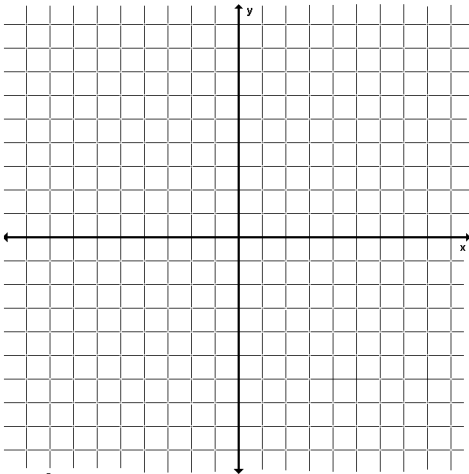
18. Solve each for the given variable.


a. Solve for a:  $\frac{a-b}{c} = xy$

b. Solve for x:  $b(x + y) = a - c$

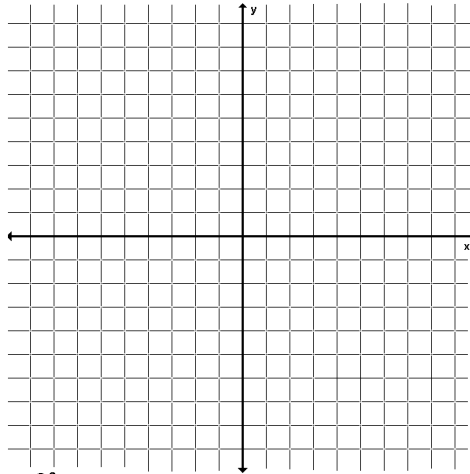
19. Graph each function.


a.  $y = -3x - 1$



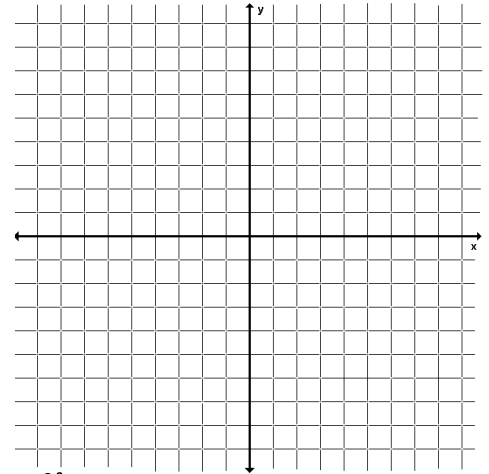
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
b.  $y = \frac{2}{3}x + 4$



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c.  $f(x) = -\frac{4}{3}x - 5$



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20. Simplify each.

a.  $x^3y^{-5} \cdot xy^{-1}$

b.  $(2x^{-2}y^4)^{-3}$

c.  $\frac{x^8y^{-6}x^3}{(x^2y^{-3})^4}$