

Slope and Slope-Intercept Equations Practice

1. Find the slope for each set of points.

$A = (-9, 0)(-9, 6)$

undefined

$B = (-9, 8)(-7, 6)$

-1

$C = (-6, 5)(-3, 7)$

 $\frac{2}{3}$

$D = (-2, 2)(-1, -3)$

-5

$E = (3, 5)(9, 7)$

 $\frac{1}{3}$

$F = (2, 2)(6, 2)$

0

2. Write the equation for each line using your answers to #1 with an ordered pair

Equation A:

$x = -9$

Equation B:

$y = -1x - 1$

Equation C:

$y = \frac{2}{3}x + 9$

Equation D:

$y = 5x - 8$

Equation E:

$y = \frac{1}{3}x + 4$

Equation F:

$y = 2$

3. Determine whether or not each relation is a function. If it isn't, explain why. Then find the domain and range for each and write it using interval notation.

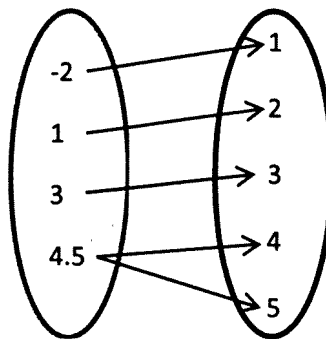
a. $\{(3,2), (1, -1), (2, -4), (3, -9), (4, -16)\}$

Function? Y or **(N)**

Domain: $\{3, 1, 2, 4\}$

Range: $\{2, -1, -4, -9, -16\}$

c.

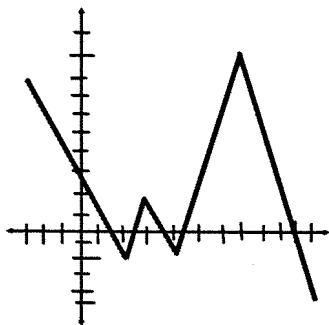


Function? Y or **(N)**

Domain: $\{-2, 1, 3, 4.5\}$

Range: $\{1, 2, 3, 4, 5\}$

b.



Function? **(Y)** or N

Domain: $[-3, 11]$

Range: $[-5, 9]$

4. Evaluate the following expressions given the functions below.

$f(x) = 14x - 3$

$g(x) = \frac{1}{2}x + 5$

$p(x) = x^2 + 8$

$q(x) = 3x^2 - 8$

$f(2) =$

25

$g(-9) =$

-129

$g(6) =$

8

$g(-8) =$

1

$p(-5) =$

33

$q(5) =$

67

find x if $f(x) = 95$

7

find x if $g(x) = 7$

4

find x if $p(x) = 33$

5