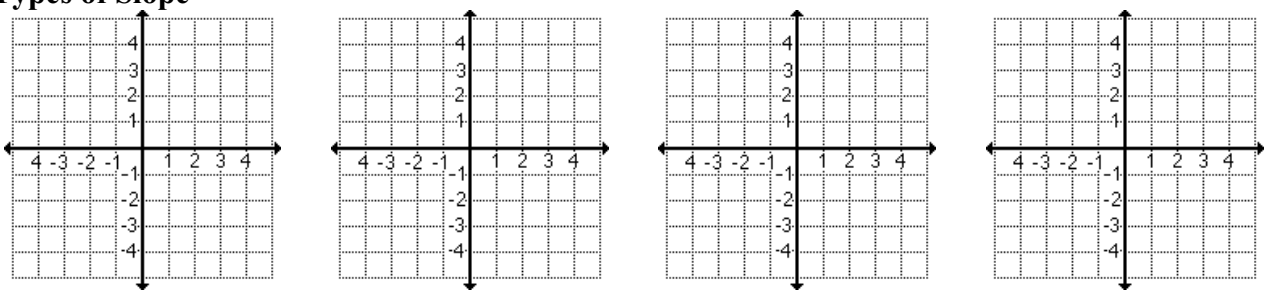
Graphing and Slope

Monday – Notes

Function:

Function Notation:

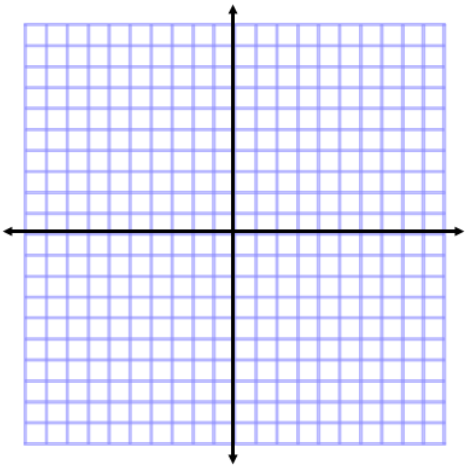
Types of Slope



FINDING MANY SOLUTIONS TO A FUNCTION

Find five solutions of $y = 2x - 5$. Write the solutions as ordered pairs. Graph by plotting ordered pairs.

x		y	(x, y)



FINDING SINGLE SOLUTIONS TO A FUNCTION

If f(x) = 2x – 5, find the value of each function:

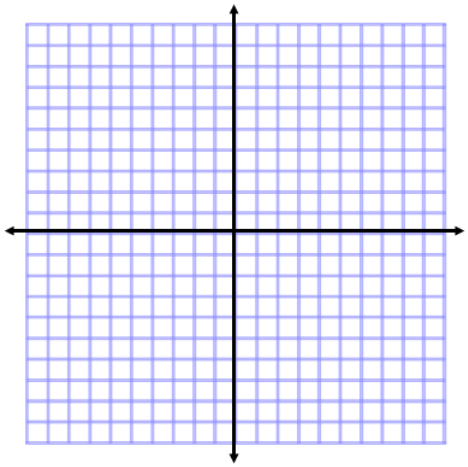
f(7) **f(−4)** **f(3)**

Graphing and Slope

Monday – Homework

Find five solutions of y = −4x + 3. Write the solutions as ordered pairs. Graph by plotting ordered pairs.

x		y	(x, y)

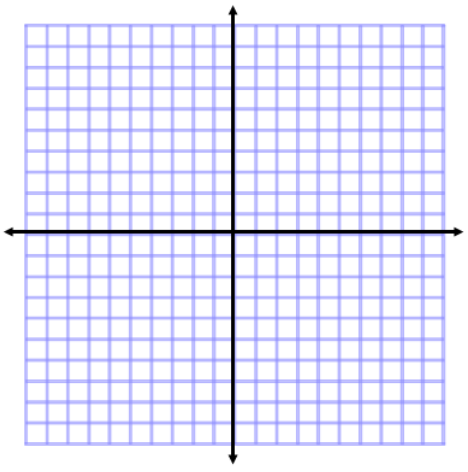


What type of slope is this? _____

Is this a function? Explain. _____

Find five solutions of −x + y = 6 . Write the solutions as ordered pairs. Graph by plotting ordered pairs.

x		y	(x, y)



What type of slope is this? _____

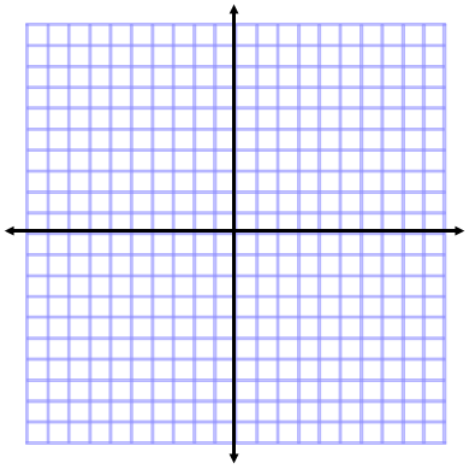
Is this a function? Explain. _____

Graphing and Slope

Monday – Homework

Find five solutions of $y = -|2x| - 5$. Write the solutions as ordered pairs. Graph by plotting ordered pairs.

x		y	(x, y)



What type of slope is this? _____

Is this a function? Explain. _____

If $f(x) = \frac{1}{2}x - 6$ find the value of each function:

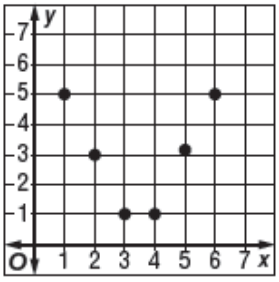
f(9) **f(−6)** **f(12)**

Graphing and Slope **Tuesday – Notes**

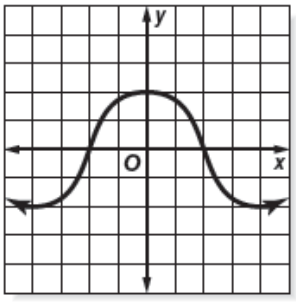
What is a function?

Graphs - Function or Not?

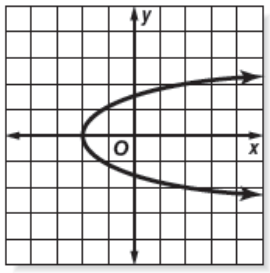
Trick:



Function or Not



Function or Not



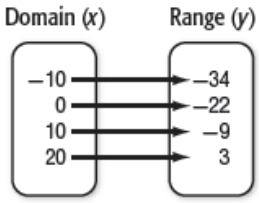
Function or Not

Tables – Function or Not?

Trick:

x	−3.0	3.5	4.1	−3.0	3.4
y	4.2	3.7	−3.8	3.7	4.0

Function or Not



Function or Not

x	8	1	−5	1	−10
y	−2	3	7	7	13

Function or Not

Ordered Pairs Function or Not?

Trick:

$\{(0, 1), (-4, -3), (-3, 6), (3, 6)\}$

Function or Not

$\{(-6, 3), (2, -2), (0, 8), (1, 1)\}$

Function or Not

$\{(4, -5), (0, -9), (1, 0), (7, 0)\}$

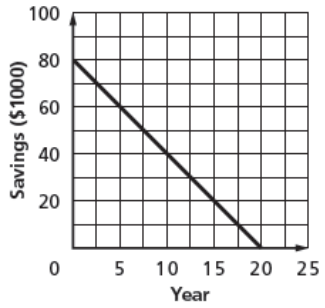
Function or Not

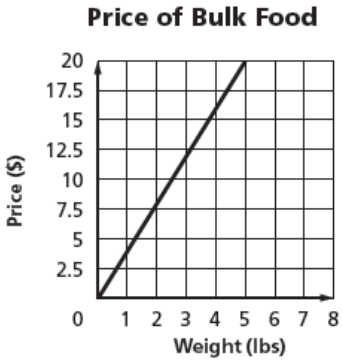
Graphing and Slope

Tuesday – Notes

How do you read slope on a graph?

Graphs - Give the slope and interpret its meaning.





Positive or Negative _____

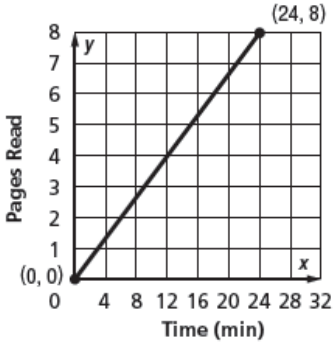
Slope _____

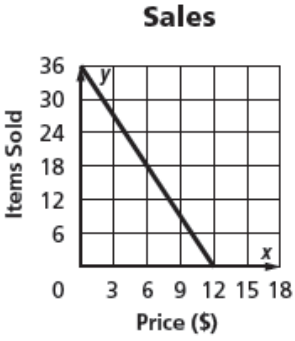
Meaning _____

Positive or Negative _____

Slope _____

Meaning _____





Positive or Negative _____

Slope _____

Meaning _____

Positive or Negative _____

Slope _____

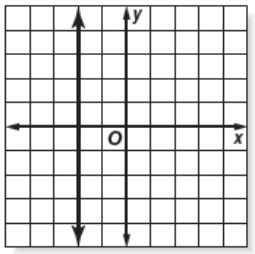
Meaning _____

Graphing and Slope **Tuesday – Homework**

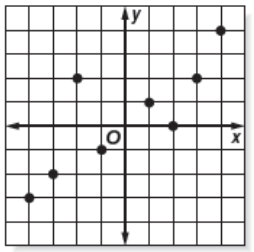
What is a function?

Graphs - Function or Not?

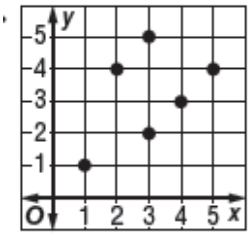
Trick:



Function or Not



Function or Not



Function or Not

Tables – Function or Not?

Trick:

x	−1.2	1.1	1.7	−1.2	1.0
y	2.8	2.3	−2.4	2.3	2.6

Function or Not

Price ($)	Pages
10.45	135
24.38	170
23.54	180
23.54	272
22.61	300

Function or Not

x	1	−3	8	−8	20
y	2	6	6	5	11

Function or Not

Ordered Pairs Function or Not?

Trick:

$\{(3,-8), (3, 2), (6, -1), (2, 2)\}$

Function or Not

$\{(5, 2), (-2, 15), (-7, 15), (1, 5), (4, 15), (-7, 2)\}$

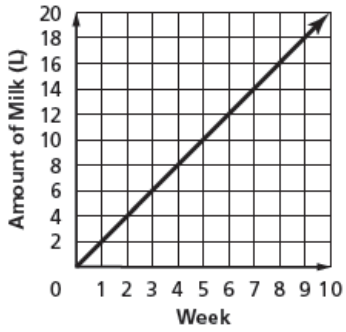
Function or Not

Graphing and Slope

Tuesday – Homework

How do you read slope on a graph?

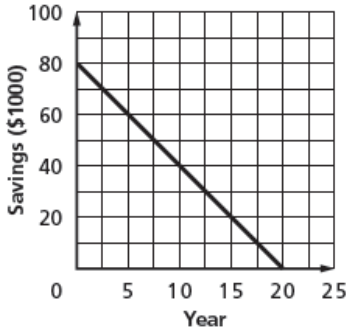
Graphs - Give the slope and interpret its meaning.



Positive or Negative _____

Slope _____

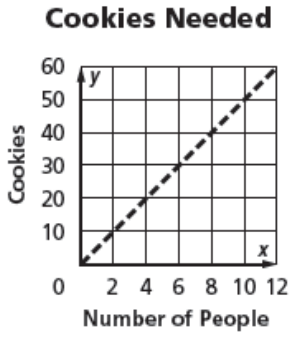
Meaning _____



Positive or Negative _____

Slope _____

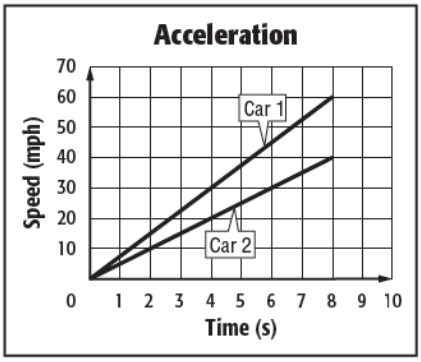
Meaning _____



Positive or Negative _____

Slope _____

Meaning _____



- Answer for Car 2

Positive or Negative _____

Slope _____

Meaning _____

Graphing and Slope **Wednesday – Notes**

How do you find slope with ordered pairs and tables?

Ordered Pairs – Find the slope of the line that passes through each pair of points.

$R(6, -5), S(7, 3)$ $T(5, -6), U(8, -12)$ $A(3, -6)$ and $B(3, -9)$

Slope _____ Slope _____ Slope _____

Slope Intercept Form

Name the slope and y-intercept of each line below.

$y = \frac{1}{4}x + 3$ $y = 4x + 12$ $3x + y = 8$

Is it in form? _____ Is it in form? _____ Is it in form? _____

Slope _____ Slope _____ Slope _____

Y-Intercept _____ Y-Intercept _____ Y-Intercept _____

Graphing and Slope **Wednesday – Homework**

How do you find slope with ordered pairs and tables?

Ordered Pairs – Find the slope of the line that passes through each pair of points.

$A(1, -5), B(6, -7)$ $T(1, 8), U(7, 8)$ $A(4, 5)$ and $B(-3, 5)$

Slope _____ Slope _____ Slope _____

$G(-15, 7), H(-10, 6)$ $R(-2, -3), S(-2, -5)$ $T(-13, 8), U(21, 8)$

Slope _____ Slope _____ Slope _____

Graphing and Slope **Wednesday – Homework**

Write Slope Intercept Form

Name the slope and y-intercept of each line below.

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

Is it in form? _____

Slope _____

Y-Intercept _____

$-3x = y + 1$

Is it in form? _____

Slope _____

Y-Intercept _____

$y = -2x - 1$

Is it in form? _____

Slope _____

Y-Intercept _____

$y = \frac{1}{4}x + 5$

Is it in form? _____

Slope _____

Y-Intercept _____

$3x - y = 6$

Is it in form? _____

Slope _____

Y-Intercept _____

$y = -x + 4$

Is it in form? _____

Slope _____

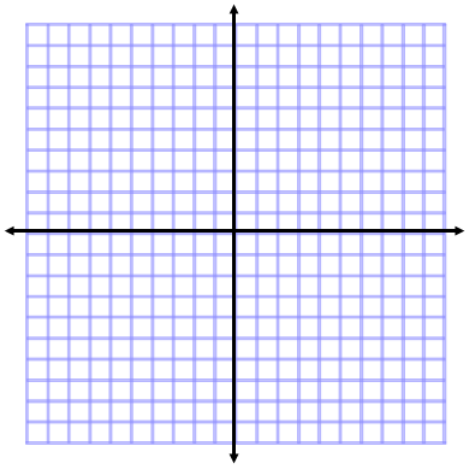
Y-Intercept _____

Graphing and Slope

Thursday – Homework (Review TEST TOMORROW)

Find five solutions of y = −3x + 8. Write the solutions as ordered pairs. Graph by plotting ordered pairs.

x		*y*	(*x*, *y*)



What type of slope is this? _____

Is this a function? Explain. _____

What is the slope (give a #)? _____

Find the slope of each graph or ordered pairs.

$L(5, 5), M(4, 2)$

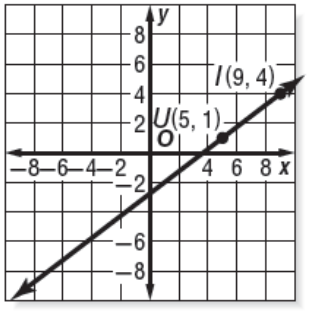
$D(2, 5), E(-6, -3)$

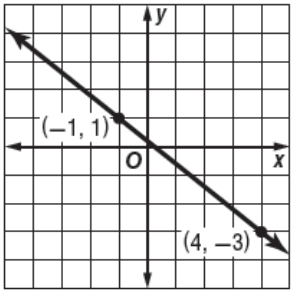
$S(-8, -2), T(1, 4)$

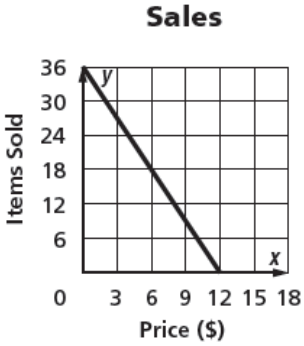
Slope _____

Slope _____

Slope _____







Slope _____

Slope _____

Slope _____

If f(x) = 2x - 9 find the value of each function:

f(5) **f(0)** **f(−3)**

Determine which relation is *not* a function.

A {(3, 2), (2, −3), (−1, 4), (−6, −5)} **C** {(−3.5, 2), (−3, 3), (−4, 4), (4, 4)}

B {(0, 4), (2, 2), (−2, −2), (0, 8)} **D** {(1, 1), (0.5, −2), (5, 4), (−1, 1)}

Which of the following values of c makes the relation {(0, 1), (1, 2), (2, 2), (c, 4)} a function?

F 1 **G** 0 **H** −2 **J** none of these

The relation {(5, 0), (1, 9), (2, 4)} is *not* a function when which ordered pair is added to the set?

F (3, 0) **G** (9, 1) **H** (−6, −8) **J** (2, 7)

Determine which relation is a function.

A {(3, 0), (0, 3), (5, 4), (0, 1)} **C** {(−1, 0), (0, 3), (−1, 4), (5, 2)}

B {(0, 0), (0, 3), (0, 4), (0, 1)} **D** {(3, 0), (2, 3), (5, 4), (6, 1)}

The relation {(2, 17), (−7, −4), (−4, 3), (0, 3)} is *not* a function when which ordered pair is added to the set?

A (−25, 20) **B** (10, 25) **C** (2, 6) **D** (9, 5)

Name the slope and y-intercept of each line below.

$4x + 3y = 6$ $y = \frac{5}{4}x - 1$ $y = 5x + 3$

Is it in form? _____ Is it in form? _____ Is it in form? _____

Slope _____ Slope _____ Slope _____

Y-Intercept _____ Y-Intercept _____ Y-Intercept _____