## Slope

**_SLOPE_** measures the _____ of a line.

**Slope is the CONSTANT RATE OF CHANGE.**

**SLOPE =** ————————— **or** —————————

Output = 🪙🪙(input) + 🏃

f(x) = change(x) + b

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What is the rate of change of each line shown?



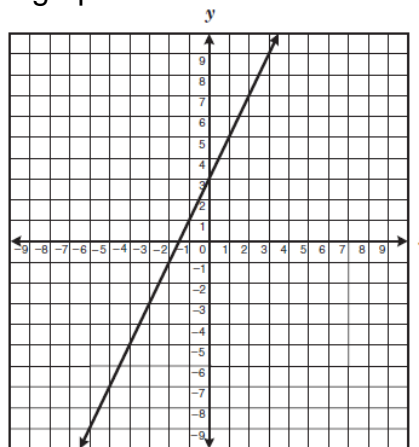m = _____
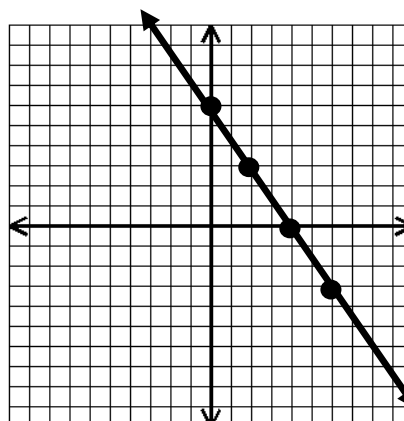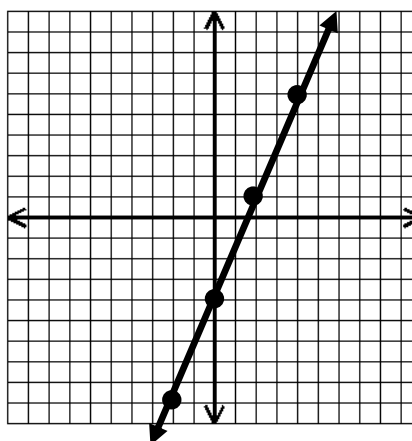


m = _____

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What are the slope, y-intercept and x-intercept of the equation of the line graphed below?
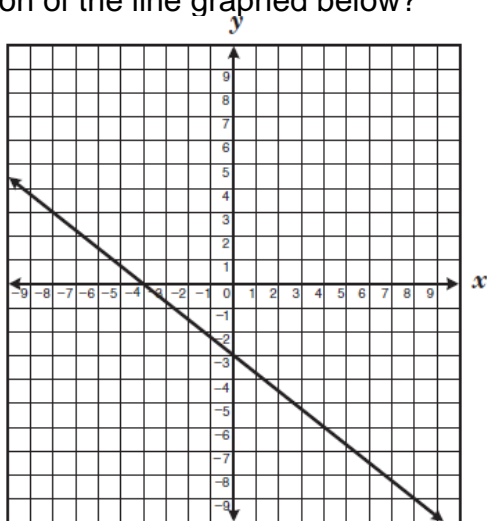


Slope:_____

y-intercept:_____ x-intercept:_____

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The graph of a line is shown below.



If the slope of this line is multiplied by -1 and the y-intercept decreases by 2 units, which linear equation represents these changes?
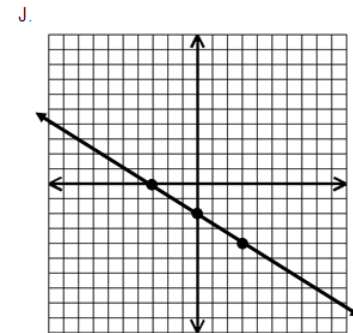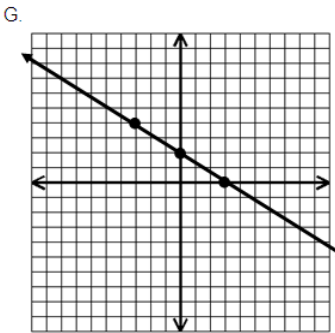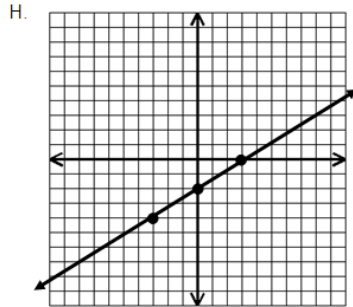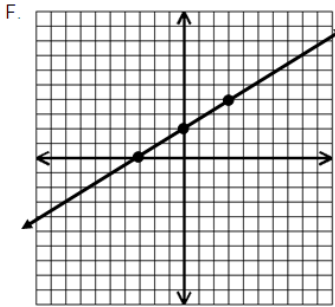
F.  y = -2x + 1

H.  y = -x – 1

G.  y = -x + 1

J.  $y = -\dfrac{1}{2}x - 1$

| | |
|---|---|
| Which graph represents the equation 2x – 3y = 6? | How does the graph of y = 2x – 5 compare to the graph of y = 3x – 5? |



F.

H.

G.

J.
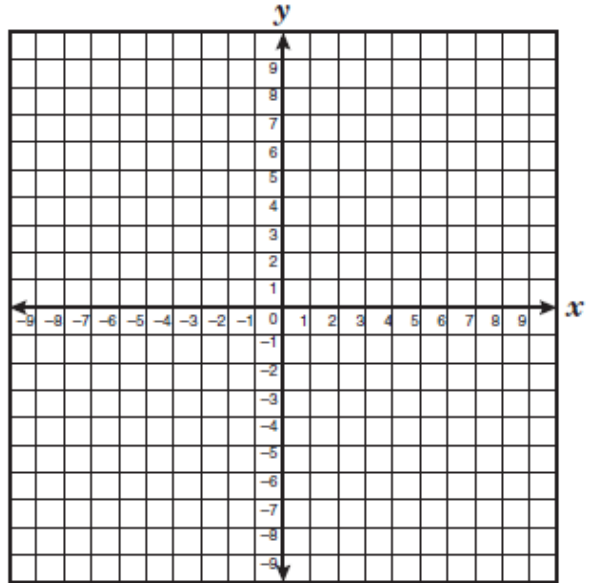


F.  The slope of  y = 2x – 5 is less steep.

G.  The slope of  y = 2x – 5 is steeper.

H.  The graph of  y = 2x – 5 has a greater y-intercept.

J.  The graph of  y = 2x – 5 has a smaller y-intercept.

| | |
|---|---|
| Which equation describes the line that passes through the point (4, 7) and is parallel to the line represented by the equation -3x + y = 4? | Which line has a slope of zero? |

Which line has an undefined slope?

_____

Remember:

VUX

HOY

F.  y = 3x + 19

H.  $y = \frac{1}{3}x + 5\frac{2}{3}$

G.  y = 3x – 5

J.  $y = -\frac{1}{3}x + 8\frac{1}{3}$