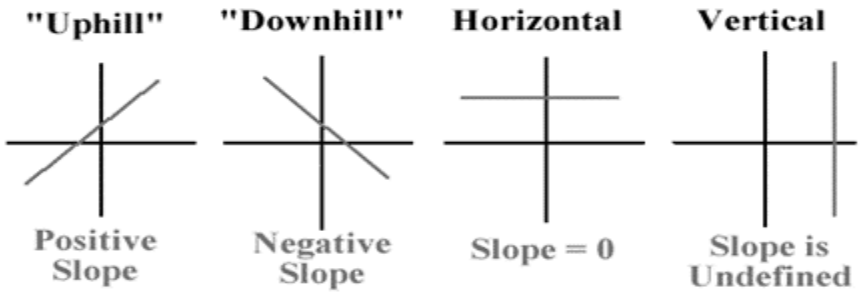
Name: Date: Period:



Take out a piece of graph paper and make 4 separate xy axes on the first side. Please do the following questions.

1. On a piece of graph paper, plot the points (1, 3) and (-3, -2) then draw the line that connects them.

   a. Use the slope formula to find the slope.

   $$m = \frac{y_2 - y_1}{x_2 - x_1}$$

   b. Check your answer using: $m = \frac{\text{Rise}}{\text{Run}}$

2. On a separate graph, plot the points (-3, 3) and (1, -1) then draw the line that connects them.

   a. Use the slope formula to find the slope.

   $$m = \frac{y_2 - y_1}{x_2 - x_1}$$

   b. Check your answer using: $m = \frac{\text{Rise}}{\text{Run}}$

3. Rewrite the points (-2,4) and (4,2) in a table, then find the slope using:

   a.

   $$m = \frac{\text{change in y}}{\text{change in x}}$$

   b. Which way should the line go from left to right?

4. Rewrite the points (5,-2) and (-7,-8) in a table, then find the slope using:

   a.

   $$m = \frac{\text{change in y}}{\text{change in x}}$$

   b. Which way should the line go from left to right?

5. Make another graph and plot the points (3, 2) and (5, 2), then draw the line that connects them.

   a. Use the slope formula to find the slope.

   $$m = \frac{y_2 - y_1}{x_2 - x_1}$$

   Notice the location of ZERO in your fraction!

   For any _____ line, the slope of the line is _____ and ZERO will always be on the TOP / BOTTOM of the fraction.

6. Make another graph and plot the points (-3, 5) and (-3, 3), then draw the line that connects them.

   a. Use the slope formula to find the slope.

   $$m = \frac{y_2 - y_1}{x_2 - x_1}$$

   Notice the location of ZERO in your fraction!

   For any _____ line, the slope of the line is _____ and ZERO will always be on the TOP / BOTTOM of the fraction.

On the back of your graph paper, make a separate xy axis for each problem.

7. Graph a line that passes through the point (3 ,1) with a slope of $\frac{2}{3}$.

8. Graph a line that passes through the point(-2,4) with a slope of 0.

9. Graph a line that passes through the point (-2, 3) with a slope of $-\frac{1}{2}$.

10. Graph a line that passes through the point (-2,4) with an undefined slope.

11. Graph a line with a slope of $\frac{1}{2}$ that passes through the point (3, 5).

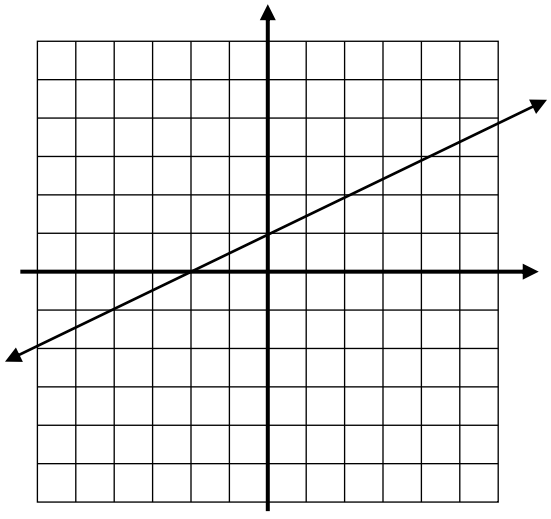
12. Graph a line with a slope of -3 that passes through the origin.

13. Find the slope

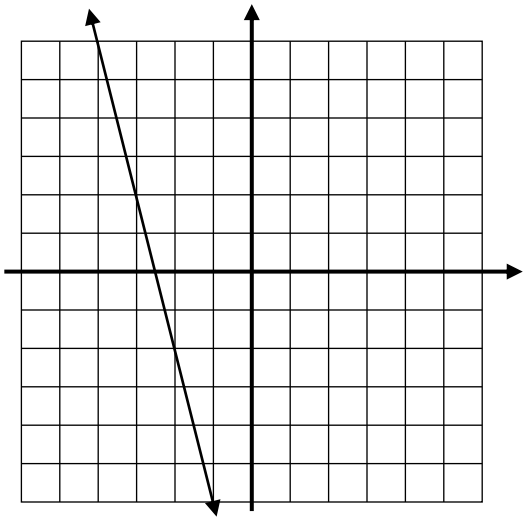
x	-5	-3	-1
y	-2	6	14

14. Find the slope of the line that passes through the points (-7, 3) and (-6, -1).

15. Find the slope:



16. Find the slope:



17. On your graph paper, graph a line with a slope of zero that goes through the y-axis at -3.

18. On your graph paper, graph a line with an undefined slope that goes through the x-axis at 5.