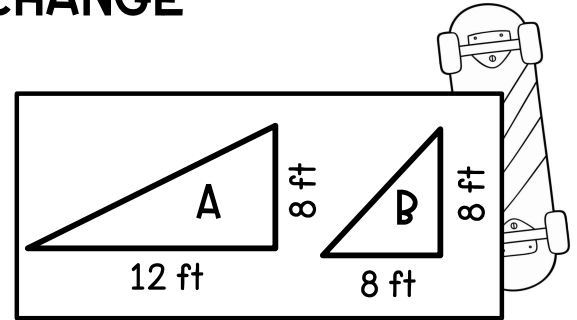


SLOPE AND RATE OF CHANGE

The side view of two ramps at a local skate park are shown.

- What measurement do the ramps have in common?
- What measurement is different between the ramps?
- Which ramp appears steeper? Justify your answer using a and b.



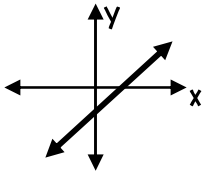
SLOPE

- When a linear relationship is graphed, the slope is a value used to describe the _____ of the line.
- Slope is the ratio of the _____ change compared to the _____ change, or $\frac{\text{RISE}}{\text{RUN}}$. Slope is equal to the _____ of _____ of the graph and the linear relationship.

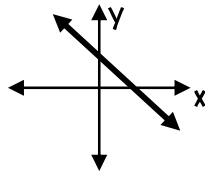
There are four types of slope as described and shown in the table below.

TYPES OF SLOPE

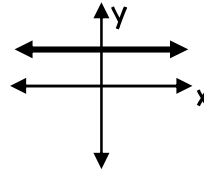
A _____ slope increases from left to right.



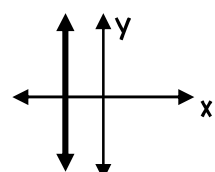
A _____ slope decreases from left to right.



A _____ slope is a horizontal line.



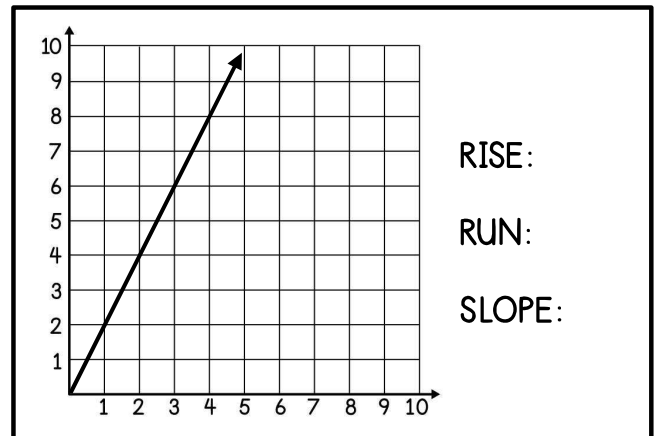
An _____ slope is a vertical line.



Follow the steps described below to find the slope of the graphed line.

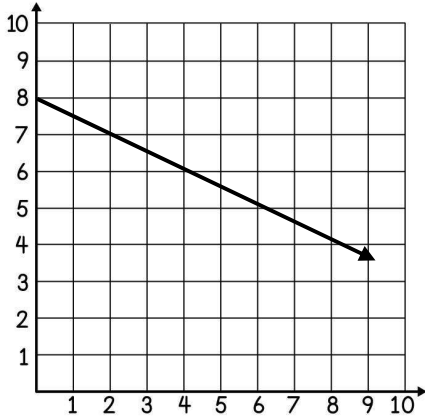
FINDING SLOPE FROM A GRAPH

- Choose two _____ on the graphed line.
- Draw a right triangle to count the _____ and the _____ between the points.
 - Set up a _____ of $\frac{\text{RISE}}{\text{RUN}}$ and simplify.
- Double check if the graph is _____ or _____.



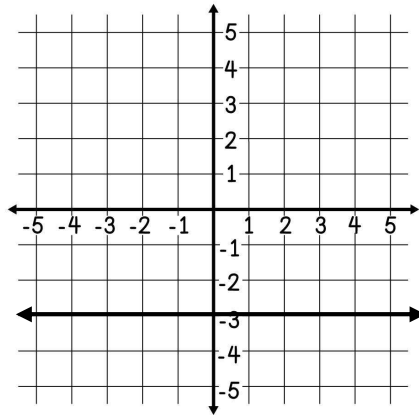
In 1-6, find the slope of each graphed line.

1.



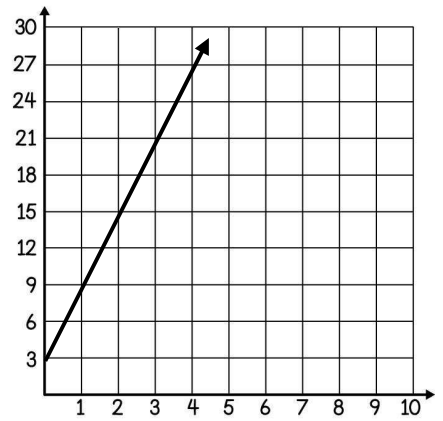
Slope: _____

2.



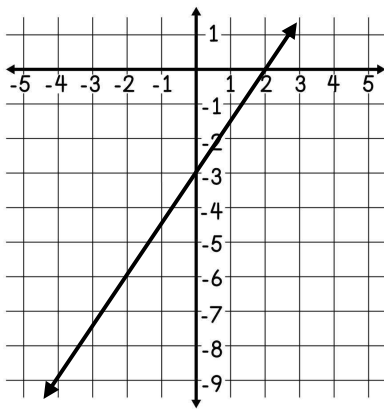
Slope: _____

3.



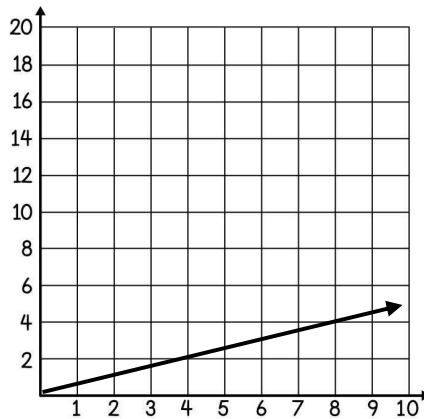
Slope: _____

4.



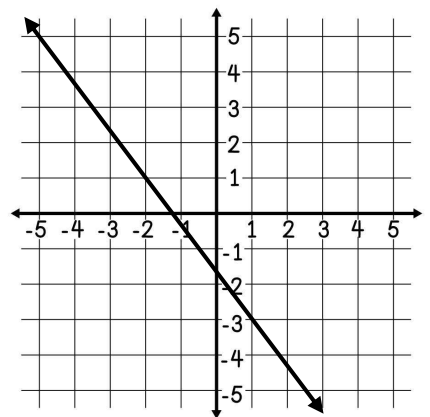
Slope: _____

5.



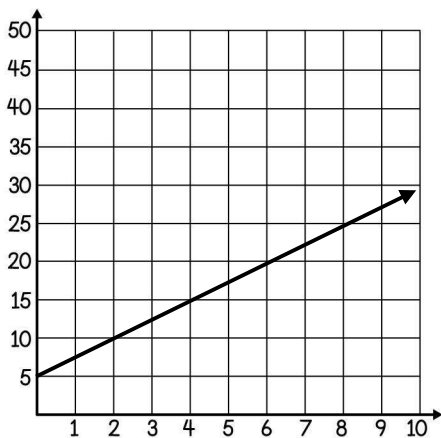
Slope: _____

6.



Slope: _____

7. Luis thinks the slope is $\frac{1}{2}$. Explain his mistake and give the correct slope.



8. The graph shows the linear relationship between number of bagels a bagel shop has remaining, and the number of customers served so far that day. Find the rate of change of bagels remaining with respect to the number of customers served.



SLOPE AND RATE OF CHANGE

In 1-6, complete each blank with the letter of the correct vocabulary term from the right.

<p>1. The slope of a vertical line will always be _____.</p> <p>2. A graph with a _____ slope decreases from left to right.</p> <p>3. The vertical change on a graph is described as the _____.</p> <p>4. The horizontal change on a graph is described as the _____.</p> <p>5. The slope of a horizontal line will always be _____.</p> <p>6. A graph with a _____ slope increases from left to right.</p>	<p>A. Positive</p> <p>B. Undefined</p> <p>C. Run</p> <p>D. Zero</p> <p>E. Negative</p> <p>F. Rise</p>
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In 7-12, find the slope of each line. Use the bank of answer choices below to check your work. Not all choices will be used.

- | | | | | | | | | | |
|---------------|-----|-----------|----------------|---------------|---|---------------|---|----|---------------|
| $\frac{2}{3}$ | -25 | UNDEFINED | $-\frac{1}{2}$ | $\frac{3}{2}$ | 2 | $\frac{1}{4}$ | 0 | -3 | $\frac{3}{4}$ |
|---------------|-----|-----------|----------------|---------------|---|---------------|---|----|---------------|

