$\qquad$

### 5.5 Slope

Objectives: 1. Find the slopes of lines.
2. Interpret the slopes of lines as rates.

Key Idea: Slope
$\qquad$ is the rate of change between any two points on a line. It is a measure of the $\qquad$ of a line.

- To find the slope of a line, find the ratio of the change in $y$ (vertical change) to the change in $x$ (horizontal change).

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



## EXAMPLE 1 Finding Slopes

Find the slope of each line.
a.


## On your own:

Find the slope of each graph
1.



## EXAMPLE 2 Interpreting a Slope

The table shows your earnings for babysitting.

| Hours, $\boldsymbol{x}$ | 0 | 2 | 4 | 6 | 8 | 10 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Earnings, $\boldsymbol{y}$ <br> (dollars) | 0 | 10 | 20 | 30 | 40 | 50 |

a. Graph the data.

$x$
b. Find and interpret the slope of the line through the points.

## On Your Own:

3. In Example 2, use two other points to find the slope. Does the slope change?
4. The graph shows the amounts you (green line) and your friend (blue line) earn babysitting
a. Compare the steepness of the lines. What does this mean in the context of the problem?
b. Find and interpret the slope of the blue line (your friend).

Babysitting


