

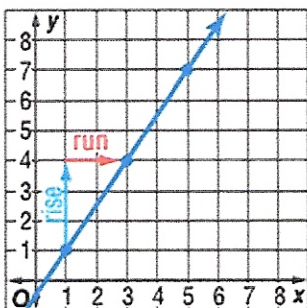
Lesson 1.8 Notes (Slope)

- **Slope** – the rate of change between any two points on a line
 - **SLOPE = RATE OF CHANGE**
- In a linear relationship, the slope between any two points is always the same.
- The slope tells us how steep the line is.
 - **Rise** = vertical change (change in y)
 - **Run** = horizontal change (change in x)

$$\text{Slope} = \frac{\text{Change in } y}{\text{Change in } x} = \frac{\text{rise}}{\text{run}}$$

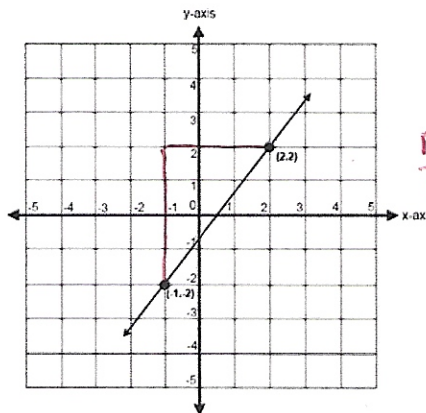
Examples: Find the slope of each line.

1.



$$\frac{\text{rise}}{\text{run}} = \frac{4}{3}$$

2.



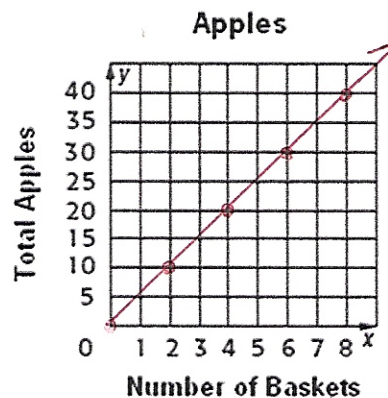
$$\frac{\text{rise}}{\text{run}} = \frac{4}{3}$$

3. The table shows the number of apples per basket at a farmer's market. Graph the data. Then find the slope of the line and explain what it represents.

Baskets	2	4	6	8
Apples	10	20	30	40

$$\text{slope} = \frac{\text{rise}}{\text{run}} = \frac{10}{2} = 5$$

5 apples per 1 basket



4. Graph the data about plant height for a science fair project. Then find the slope of the line and explain what it represents.

$$\text{slope} = \frac{\text{rise}}{\text{run}} = \frac{3}{2}$$

Plant grows 3 cm every 2 weeks

Week	Plant Height (cm)
1	1.5
2	3
3	4.5
4	6

