Algebra 1 ECA Remediation Lesson 8

Constant Rates of Change

Slope: The change in one quantity divided by the change in another quantity.

$m = \frac{rise}{run}$ $m = \frac{y_2 - y_1}{x_2 - x_1}$ Slope is a constant rate of change.

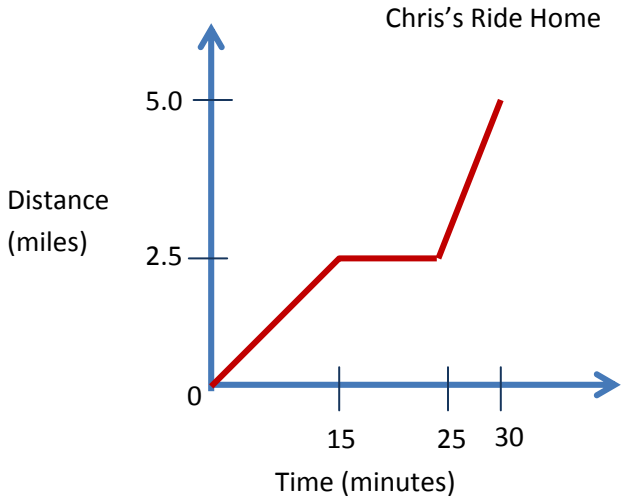
Note: A. The steep a line is, the larger the slope will be.
This also means that steep lines represent the largest change between one quantity to another.

B. Horizontal lines have a slope of zero.

Examples:

1. Find the slope of the line that passes through these two ordered pairs.
(2, 5) and (–3, 1)

2. Chris rode his skateboard to school. The graph below shows Chris's distance from home over time.

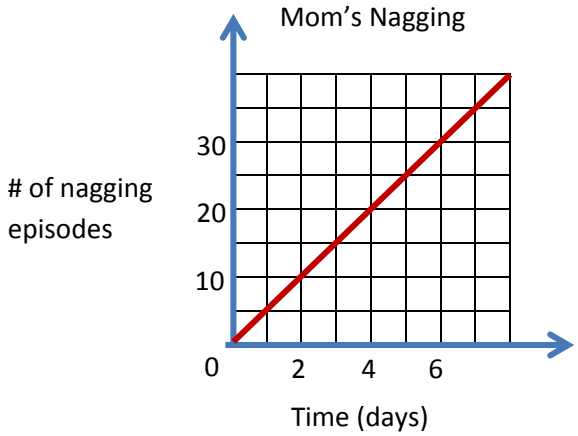


A. On what time interval is Chris traveling at a 4 miles an hour?

B. On what time interval is Chris stopped?

C. On what time interval is Chris traveling the fastest?

3. The graph below represents the total number of times a mother nags her son to clean his bedroom over a 5 – day period.



A. What is the slope of the line segment? Include the appropriate units in your answer.

B. Write an equation that represents the total number of times a mom will nag her son about cleaning up his room, N, after, d, days.

C. If this trend continues, how many times will the mom nag the son in 30 days?