Chapter 5
Linear Functions

Journal Entry:
   What do you know about linear functions already? What makes something a linear function as opposed to a nonlinear function? What does the slope of a line on a graph describe?

Aug 18-2:52 PM

Section 5-1
Rate of Change and Slope

Students will be able to
   -find the rates of change from tables
   -find slope

Aug 18-2:52 PM

Look at the Solve It, Getting Ready problem on page 294 and answer the question.

Aug 18-2:52 PM

-You can use ratios to show a relationship between changing quantities, like vertical and horizontal change.

Rate of Change = $\dfrac{\text{change in the dependent variable}}{\text{change in the independent variable}}$

Aug 18-2:52 PM

The table shows the elevation of a hang glider over time.

Time (mins)	Elevation (ft)
1	360
2	325
3	290
4	255

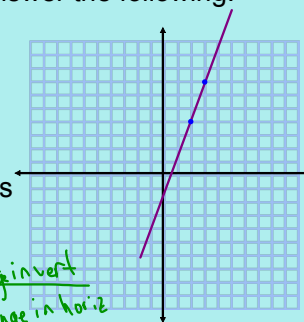Is the rate of change in elevation with respect to time constant?

What does the rate of change represent?

Aug 18-2:52 PM
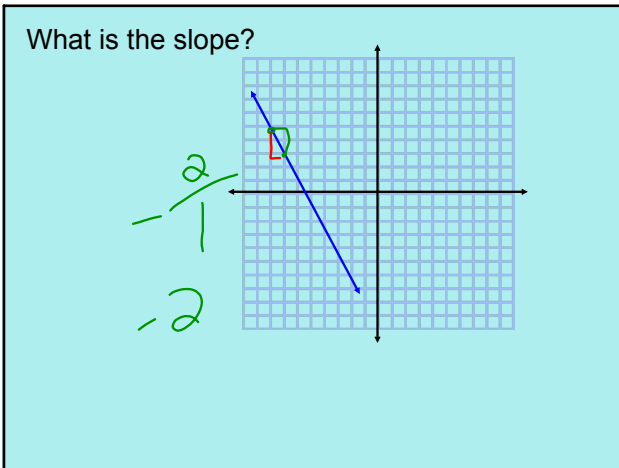
Use the graph to answer the following:

What is the slope?
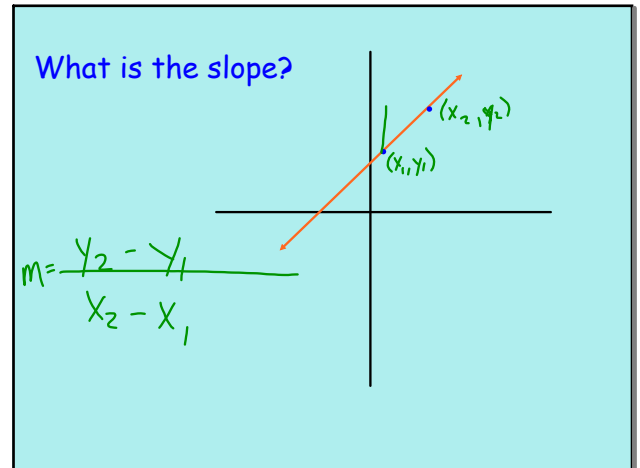
What are some ways to think of slope?

rise , Change in vert
run , Change in horiz

Aug 18-2:52 PM

1

What is the slope?

$-\dfrac{2}{1}$

-2

Aug 18-2:52 PM

What is the slope?

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

Aug 18-2:52 PM

Use the formula to help find the slope of the two following lines.

$m=0$

$(0, -4)\ (1, -4)$

$(6, 0)\ (6, 3)$

$m = und.$

$m = \dfrac{-4 + (+4)}{0 - 1} = \dfrac{0}{-1} = 0$

$m = \dfrac{3 - 0}{6 - 6} = \dfrac{3}{0}$
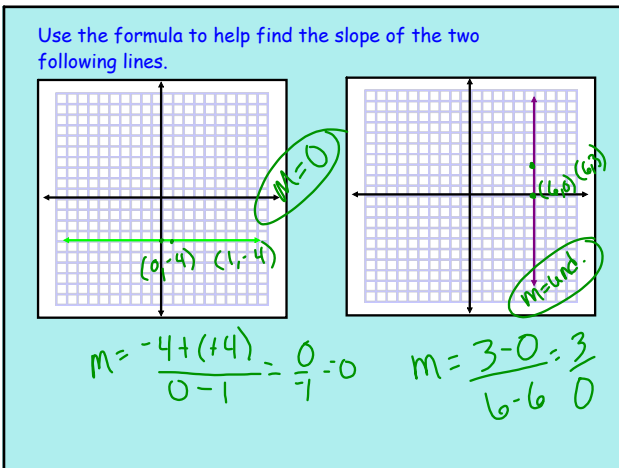
Aug 18-2:52 PM

Hwk: pg. 298 - 300
#8 - 24 evens, 28 - 29,
30 - 46 evens, 50, 58

Jan 7-2:31 PM