Unit 5 Lesson 2 Slope

Warm Up: Identify the following as linear or non-linear. Justify your reasoning.

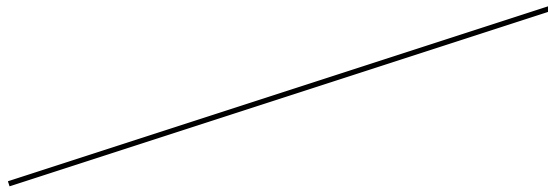| x	y
-6	11
-4	8
0	2
2	-1
4	-4
6	-7
8	-10

Unit 5 – Linear Relations I
Day 2 - Slope

Today we will:

1. Define slope.
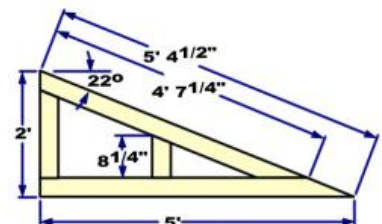2. Identify different methods to determine slope of a line.

Lines and Slope

The slope of a line is the _____ of the line.

To calculate the slope, we look at the _____,
both vertically and horizontally, from one _____ to another _____ on the line.

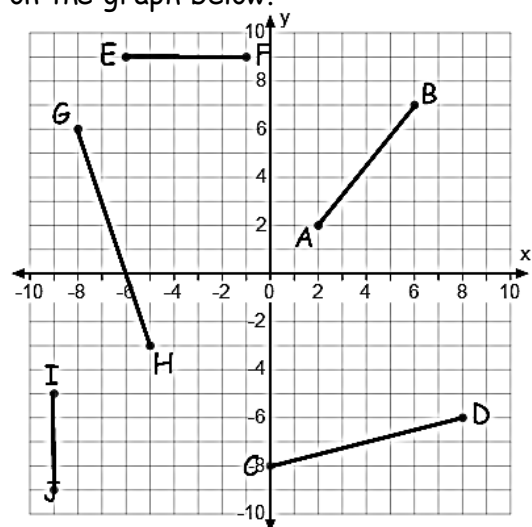Why is being able to determine the steepness of a line an important skill?

What is the slope of the skateboard ramp above?

5' 41/2"
22°   4' 71/4"
2'
81/4"
5'

Explain the meaning of the slope in this situation.
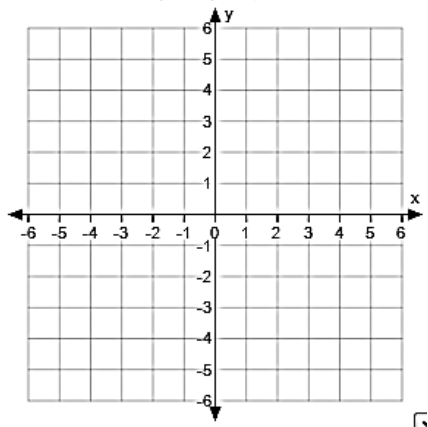
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Example 1: Determine the slope of each line segment given on the graph below.

Is there a way to calculate the slope if we are not given the graph, but instead just have two points that are on the line?

Example 2: Given that a line has a slope of 4 and goes through the point B(3, -5), find the coordinates of another possible point on the line.
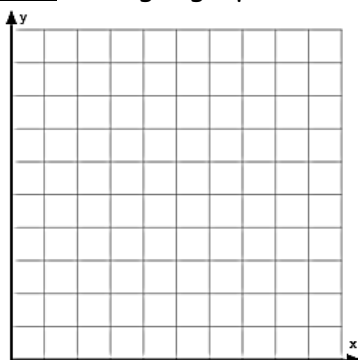
<u>Method 1</u>: Using a graph   <u>Method 2</u>: Using the coordinate

Example 3: Determine the slope of the line given by the table of values.

<u>Method 1</u>: Using a graph   <u>Method 2</u>: Using the table

X	Y
0	50
5	70
10	90
15	110
20	130

Pg. 259 – 263 # 1, 3, 5, 7, 9, 11, 13, 15, 19