**Magnitude of Slope**

In this activity you will identify when a line is *steepe*r than another line by looking comparing equations or comparing sets of points.

1. Solid or Dashed?
2. Which line do you think is steeper?
3. Find the slope of each line.

Slope of solid line:

Slope of dashed line:



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1. Using the slope formula, calculate the slope of each line.
2. (2, 5) and (-2, 10) (b) (3, 1) and (-3, -10)

Which line do you think is steeper, line (a) or line (b)?

1. When selecting between two lines, how can you tell from the slope which line is steeper?
2. When selecting between two lines, how can you tell from the slope which line is flatter?



1. Graph $=\frac{2}{3}x+4$ .

|  |  |
| --- | --- |
| *x* | *y* |
| 0 |  |
| 3 |  |
| -3 |  |

1. Graph $=-\frac{5}{2}x+7$ .

|  |  |
| --- | --- |
| *x* | *y* |
| 0 |  |
| 2 |  |
| 4 |  |

1. Which of the lines in Exercises 6 and 7 is steeper? Explain why.
2. Calculate the slope between the following points using the slope formula . Then, in a few words, tell what the line that passes through the points looks like. Is it steep or not so steep? Is it increasing, decreasing, or horizontal?

a. (1, 2) and (-2, 11). b. (0, 5) and (2, 10)

 c. (1, 1) and (1, -5) d. (-8, 1) and (5, 1)

1. Find the slope of each line of the graph using the grid to count the change in *y* and the change in *x*. Then tell if the line is steep or not so steep.



A:

B:

C:

D:

E: