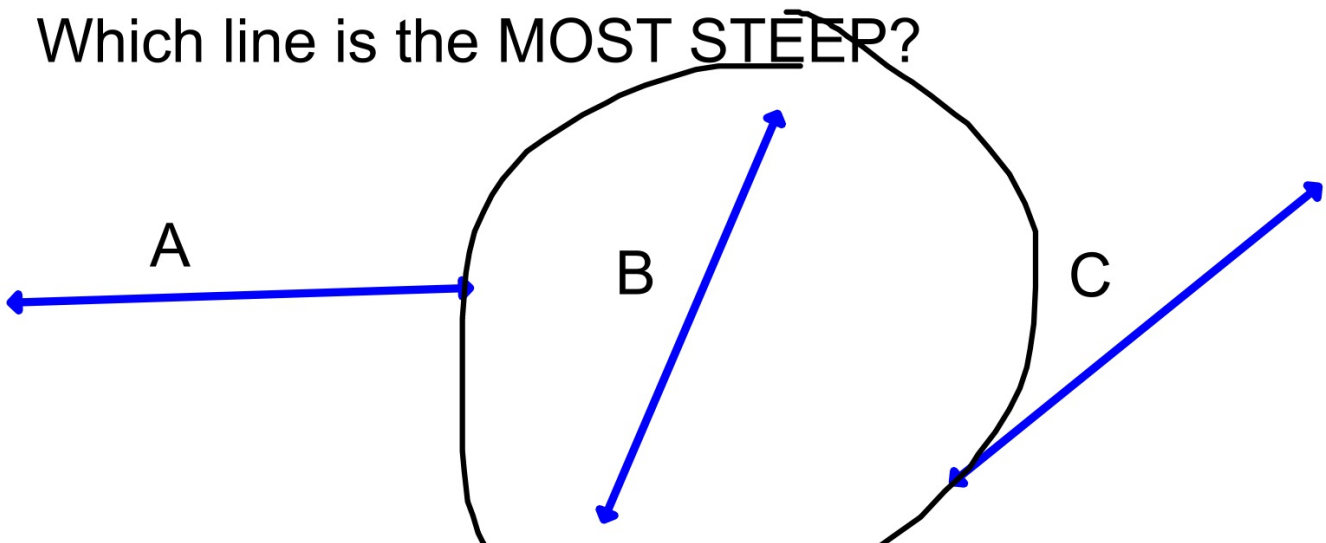
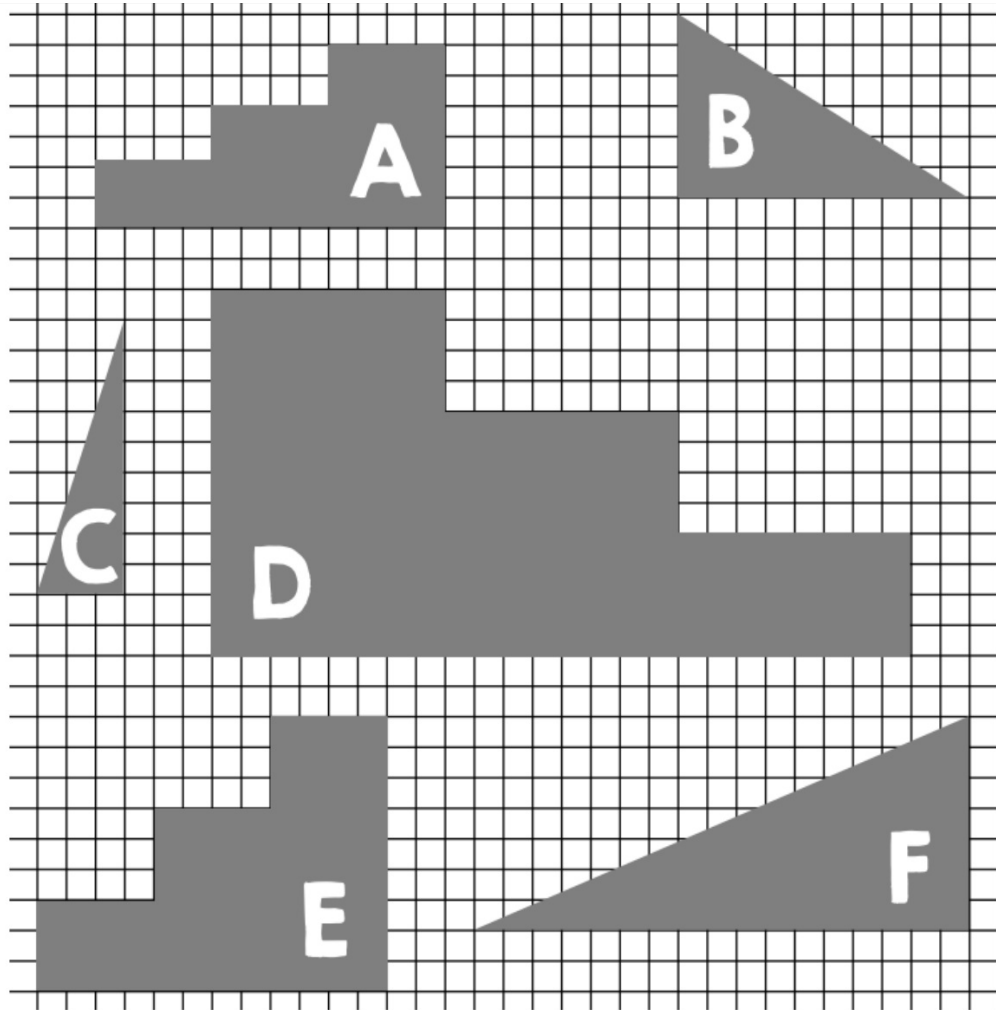


Bellwork: Algebra 1

1. Make sure you have your composition book.
2. Take out your green sheet from yesterday.
3. Write down your homework for the night.
4. Answer the following question on your TUESDAY bellwork:

Which line is the MOST STEEP?









WHAT IS SLOPE?

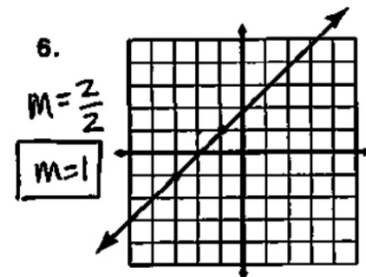
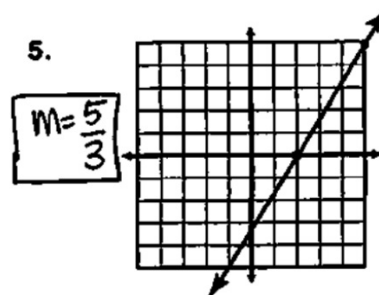
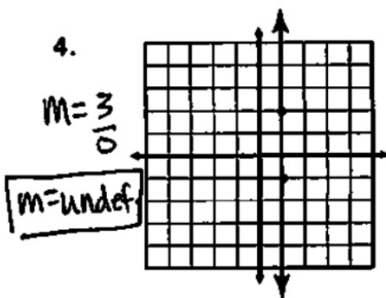
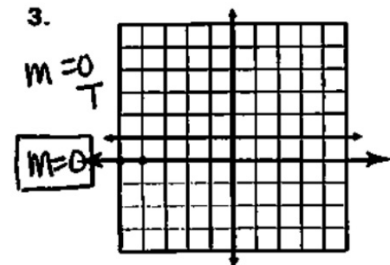
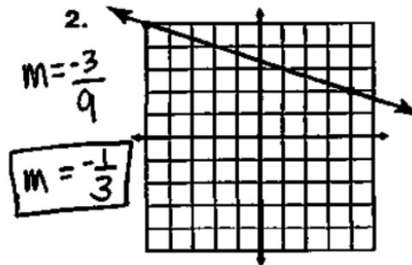
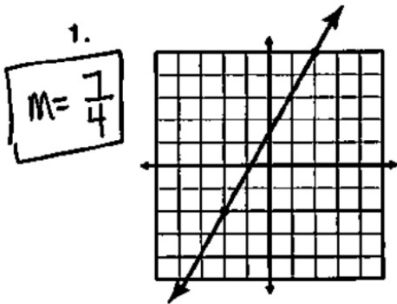
- The constant rate of change between points on a line.
- A ratio of the rise to the run of a line.
- Known as variable m.

TYPES OF SLOPE

			
Positive	Negative	Zero	Undefined

FINDING SLOPE GIVEN A GRAPH

$$m = \frac{\text{rise (vertical change } \updownarrow \text{)}}{\text{run (horizontal change } \leftrightarrow \text{)}}$$



Main Ideas/Questions	Notes
<i>Slope Formula</i>	<p>Used to find the slope between two points (x_1, y_1) and (x_2, y_2)</p> <p>Formula: $m = \frac{y_2 - y_1}{x_2 - x_1}$</p> <p>*It is important to remember to SIMPLIFY your answer!</p>

1. (1, 1) and (4, 3)

$$m = \frac{3-1}{4-1} = \boxed{\frac{2}{3}}$$

2. (-2, 4) and (10, -2)

$$m = \frac{-2-4}{10-(-2)} = \frac{-6}{12} = \boxed{-\frac{1}{2}}$$

3. (-4, 5) and (-8, -5)

$$m = \frac{-5-5}{-8-(-4)} = \frac{-10}{-4} = \boxed{\frac{5}{2}}$$

4. (10, 0) and (-2, 4)

$$m = \frac{4-0}{-2-10} = \frac{4}{-12} = \boxed{-\frac{1}{3}}$$

5. (5, 9) and (3, 9)

$$m = \frac{9-9}{3-5} = \frac{0}{-2} = \boxed{0}$$

6. (-7, 8) and (-7, 5)

$$m = \frac{5-8}{-7-(-7)} = \frac{-3}{0} = \boxed{\text{undef}}$$

7. (-1, 9) and (2, 3)

$$m = \frac{3-9}{2-(-1)} = \frac{-6}{3} = \boxed{-2}$$

8. (-4, 13) and (6, -2)

$$m = \frac{-2-13}{6-(-4)} = \frac{-15}{10} = \boxed{-\frac{3}{2}}$$

9. (5, 6) and (6, 5)

$$m = \frac{5-6}{6-5} = \frac{-1}{1} = \boxed{-1}$$

10. (9, -4) and (1, -4)

$$m = \frac{-4-(-4)}{1-9} = \frac{0}{-8} = \boxed{0}$$

11. (5, -9) and (3, -2)

$$m = \frac{-2-(-9)}{3-5} = \frac{7}{-2} = \boxed{-\frac{7}{2}}$$

12. (4, 6) and (4, 8)

$$m = \frac{8-6}{4-4} = \frac{2}{0} = \boxed{\text{undef.}}$$

Slope dude:

<https://www.youtube.com/watch?v=ZcSrJPiQvHQ>