

1. Slope through (1, 2) and (3, 8)?

$$(8-2)/(3-1) = 6/2$$

Answer: 3

2. Slope through (0, 5) and (4, 5)?

$$(5-5)/(4-0) = 0/4$$

Answer: 0 (flat)

3. Slope through (2, 7) and (5, 1)?

$$(1-7)/(5-2) = -6/3$$

Answer: -2

4. Graph $y = 2x + 1$: start at (0,1), then rise 2 run 1. Plot 3 points.

$$(0,1), (1,3), (2,5)$$

Answer: line through those points

5. Graph $y = -x + 4$: plot (0,4),(1,3),(2,2).

Down 1 each step right

Answer: falling line

6. Slope through (-2, 3) and (4, 3)?

Same y both times

Answer: 0

7. A line has slope $1/2$ through (0, -3). Give two more points.

Rise 1, run 2 from (0,-3)

Answer: (2,-2) and (4,-1)

8. Slope through (-1, -4) and (2, 5)?

$$(5-(-4))/(2-(-1)) = 9/3$$

Answer: 3

9. Line A: (0,2) & (3,8). Line B: (0,8) & (4,0). Which is steeper (bigger $|m|$)? ★ challenge

$$A: 6/3 = 2$$

$$B: -8/4 = -2; |2| = |-2|$$

Answer: Equally steep - opposite directions

10. A line through (2, 5) has slope -3. Find where it crosses the y-axis. ★ challenge

$$b: 5 = -3(2) + b$$

$$b = 11$$

Answer: (0, 11)