

2.2 Practice: Slope from Multiple Representations

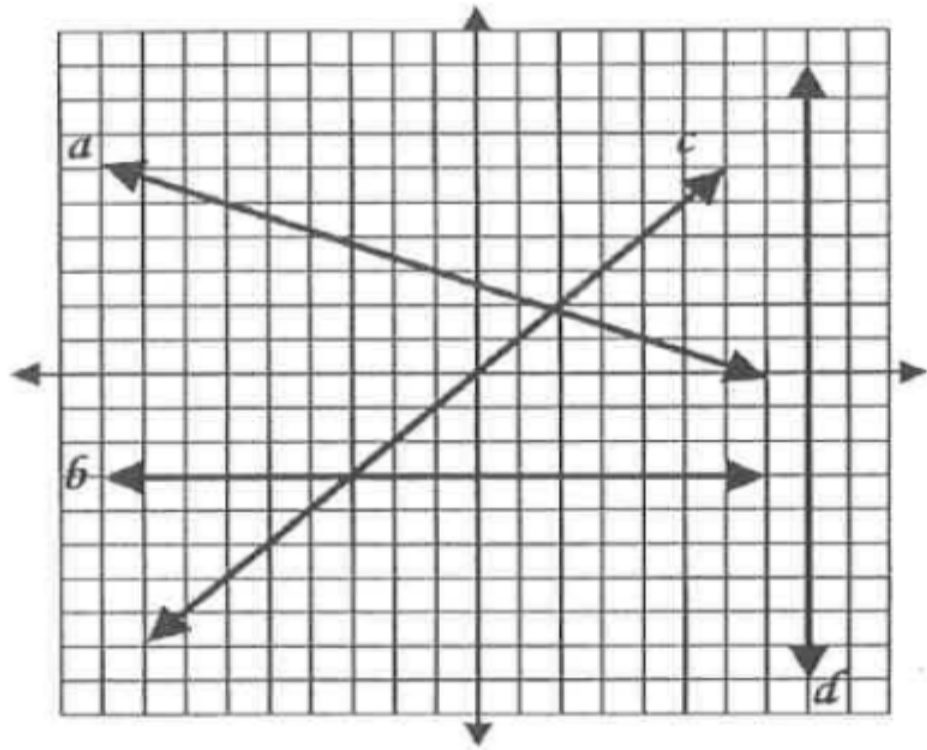
Use the graph to the right to find the slopes of the lines indicated.

1. Find the slope of line a :

2. Find the slope of line b :

3. Find the slope of line c :

4. Find the slope of line d :



$$\text{SLOPE (m)} = \frac{y_2 - y_1}{x_2 - x_1} \quad (x_1, y_1) \quad (x_2, y_2)$$

Find the slope of the line that passes through each set of points.

3. $(-2, 3)$ and $(4, 8)$

4. $(7, 6)$ and $(-5, 2)$

5. $(1, 2)$ and $(5, 2)$

6. $(2, 1)$ and $(2, 5)$

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Find the slope, given the tables below: *remember

7.

X	Y
0	8
1	13
2	18
3	23
4	28
5	33

8.

X	Y
2	8
5	7
8	6
11	5
14	4
17	3

9.

X	Y
0	5
1	10
2	20
3	40
4	80
5	160

Rate of Change: _____ Rate of Change: _____ Rate of Change: _____

Linear Function (Y/N)? _____ Linear Function (Y/N)? _____ Linear Function (Y/N)? _____

10. Roger is typing a 1200 word essay he had written by hand. Roger averages 75 words per minute. Roger had already typed 150 words the day before.

- What is the constant rate of change? _____
- What is the initial value? _____

11. Jeff has a cell phone plan that charges \$0.09 per minute plus a monthly fee of \$23.00.

- What is the constant rate of change? _____
- What is the initial value? _____

12. **What do we know about the following linear equation?** $y = -4x + 5$

Create three ordered pairs: _____

Name the slope: _____ Increasing or Decreasing ?

13. **What do we know about the following linear equation?** $y = 1 + 5x$

Create three ordered pairs: _____

Name the slope: _____ Increasing or Decreasing ?

2.2 Practice: Slope from Multiple Representations

14. $y = -2x + 4$

Which of the following statements about the slope is true?

- a. As the x value decreases by 2, the y value increases by 2.
- b. As the x value increases by 1, the y value decreases by 2.
- c. As the x value increases by 2, the y value decreases by 1.
- d. As the x value decreases by 1, the y value decreases by 2.

15. Greg is going to the Warrior football game. He buys a ticket for \$3.50 and decides to buy several things of nachos that cost \$3 each.

Which of the following statements about the slope is true?

- a. The slope represents Greg's total cost.
- b. The slope represents how many items of food Greg can buy.
- c. The slope represents the cost of the ticket.
- d. The slope represents the cost per food item.