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 $d$:
   
   
   SLOPE $(m) = \frac{y_2-y_1}{x_2-x_1}$ \hspace{1cm} (\(x_1, y_1\)) \hspace{1cm} \(x_2, y_2\)

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)
2.2 Practice: Slope from Multiple Representations

Find the slope, given the tables below: *remember

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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.

a. What is the constant rate of change?_______________________

b. 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.

a. What is the constant rate of change?_______________________

b. 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.