Unit Test - Slope and Linear Graphs

Multiple Choice (80 points, 5 points each)

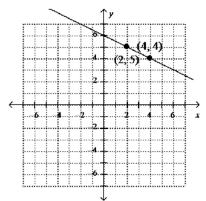
Identify the choice that best completes the statement or answers the question.

- 1. Find the slope of the line that passes through the points (2,7) and (2,-6).
 - **A.** 1
 - **B.** 0
 - C. undefined
 - **D**. -1
- 2. Find the slope of the line that passes through the points (4,10) and (2,10).
 - **A.** 1
 - **B.** 0
 - C. undefined
 - **D**. -1
- 3. Find the slope of the line that contains (10, -1)and (-8, 6).

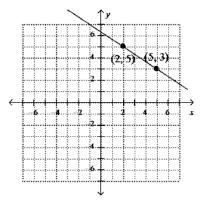
 - **B.** $-\frac{7}{18}$
 - C. $-\frac{18}{7}$
 - **D.** $\frac{5}{2}$
- 4. Find the slope of the line that contains (2, -10)and (-4, 2).

 - **B.** −2
 - **C.** 4
 - **D.** $-\frac{1}{2}$

- 5. Find the slope of the line that contains (-2, -2) and (-10, -9).
 - A. $\frac{8}{7}$
 - **B.** $\frac{11}{12}$
 - C. $\frac{12}{11}$
 - **D.** $\frac{7}{8}$
- 6. Find the slope of the line.



- **A.** 1 **B.** $\frac{1}{2}$
- C. -2D. $-\frac{1}{2}$
- 7. Find the slope of the line.



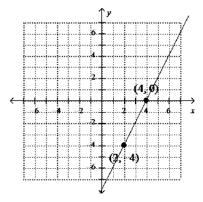


B.
$$\frac{2}{3}$$

C.
$$-\frac{2}{3}$$

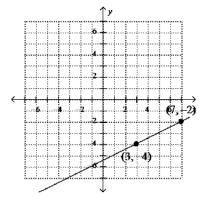
D.
$$-\frac{3}{2}$$

8. Find the slope of the line.



C. 2 D.
$$\frac{1}{2}$$

9. Find the slope of the line.

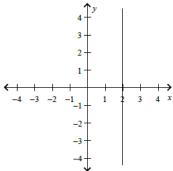


A.
$$-\frac{2}{3}$$

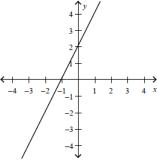
B.
$$\frac{1}{2}$$

C.
$$-\frac{1}{2}$$

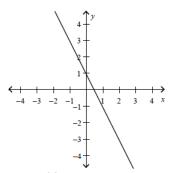
10. Tell whether the slope of the line is positive, negative, zero, or undefined.



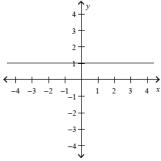
- A. negative
- **B.** positive
- C. undefined
- D. zero
- **11.** Tell whether the slope of the line is positive, negative, zero, or undefined.



- A. undefined
- B. negative
- C. positive
- **D.** zero
- **12.** Tell whether the slope of the line is positive, negative, zero, or undefined.

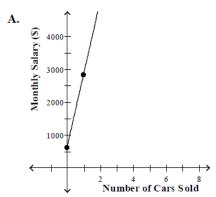


- A. positive
- B. zero
- C. negative
- D. undefined
- **13.** Tell whether the slope of the line is positive, negative, zero, or undefined.



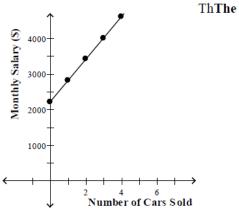
- A. undefined
- B. negative
- C. positive
- D. zero
- **14.** Thomas is a car salesman. The table shows the salary that Thomas earns for the number of cars he sells. Use the data to make a graph. Then, find the slope of the line and explain what it shows.

Number of Cars	Monthly Salary
Sold	Earned
0	\$2200
1	\$2800
2	\$3400
3	\$4000
4	\$4600



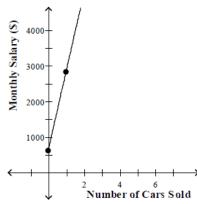
The slope of the line is 2200. This means that for every car Thomas sells, he earns \$2200.

В.



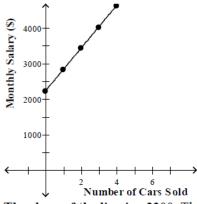
slope of the line is 600. This means that for every car Thomas sells, he earns \$600.

C.



The slope of the line is 600. This means that for every car Thomas sells, he earns \$600.

D.



The slope of the line is 2200. This means that for every car Thomas sells, he earns \$2200.

15. Find the slope of the table below.

Х	у
-3	10
-1	4
1	-2

A. -6

B. -3

C. 6

D. 3

16. Find the slope of the table below.

X	У
-3	-2
-1	0
1	2

A. -2

B. 1

C. -1

D. 2

17. Find the slope of the table below.

X	У
-10	-1
0	1
10	3

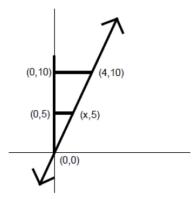
A. 5

B. 1

C. 1/5

D. 10

18. What is the value of x?



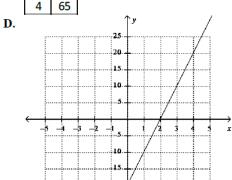
- **A.** 1
- **B.** 2
- **C.** 3
- **D.** 3.5
- 19. Which of the following is the STEEPEST slope?
 - **A.** m = -7
 - **B.** $m = \frac{1}{10}$
 - C. m = 5
 - **D.** m = 1
- 20. Which of the following is the STEEPEST slope? A. m = 100

Short Answer

- **22.** Describe the slope of a horizontal line. Explain your answer. **(5 points)**
- **23.** Describe the slope of a vertical line. Explain your answer. **(5 points)**

- **B.** $m = \frac{1}{5}$
- **C.** m = -3
- **D.** m = 1
- 21. Which of the following has the STEEPEST slope
 - **A.** A line containing (-1,2) and (4,102)
 - **B.** Matt reads 27 books in 3 hours.

В.	Matt reads		
C.	X	у	
	0	5	
	2	35	
	1	CE.	



Answers

MULTIPLE CHOICE

- **1.** C
- 2. B
- **3.** B
- **4.** B
- **5.** D
- **6.** D
- 7. C
- **8.** C
- **9.** B
- **10.** C
- 11. C
- **12.** C
- 13. D
- **14.** B
- **15.** B
- **16.** B
- **17.** C
- **18.** B
- **19.** A
- 20. A
- **21.** A

SHORT ANSWER

- 22. The slope of a horizontal line is 0 because horizontal lines have no RISE. Slope is rise over run and the slope of a horizontal line will therefore always be 0 divided by some number. 0 divided by any number is always 0.
- 23. The slope of a vertical line is undefined. This is because vertical lines have no RUN. Slope is rise over run and any number divided by 0 is undefined.