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 $(-8, 6)$.

   A. $\frac{2}{5}$

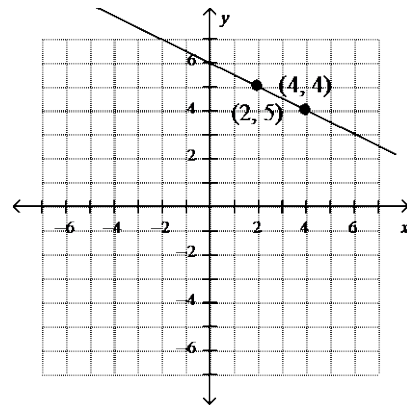   B. $-\frac{7}{18}$

   C. $-\frac{18}{7}$

   D. $\frac{5}{2}$

4. Find the slope of the line that contains $(2, -10)$ and $(-4, 2)$.

   A. $\frac{1}{4}$

   B. -2

   C. 4

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

5. Find the slope of the line that contains $(-2, -2)$ and $(-10, -9)$.

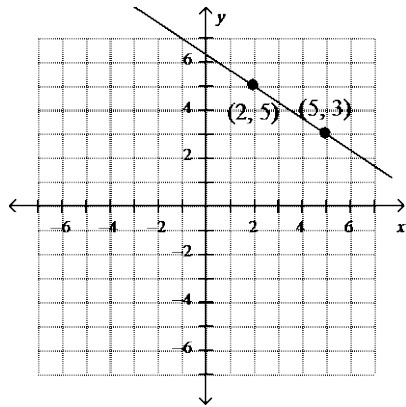   A. $\frac{8}{7}$

   B. $\frac{11}{12}$

   C. $\frac{12}{11}$
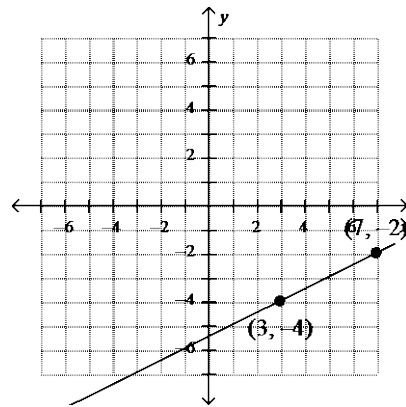
   D. $\frac{7}{8}$

6. Find the slope of the line.

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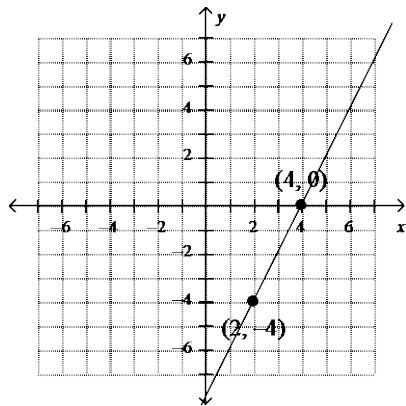
7. Find the slope of the line.

A. $\frac{3}{5}$

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

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

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

A. $-\frac{2}{7}$

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

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

D. 2

8. Find the slope of the line.

A. 0

B. −2

C. 2

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

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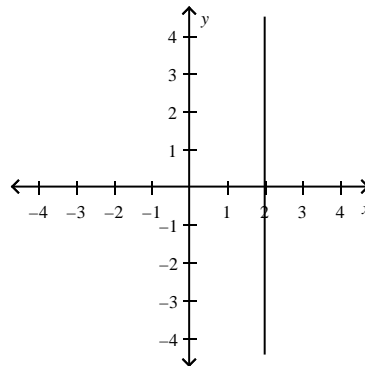
A. negative

B. positive

C. undefined

D. zero

9. Find the slope of the line.

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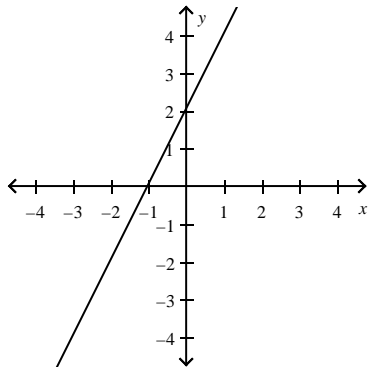
A. undefined
B. negative
C. positive
D. zero
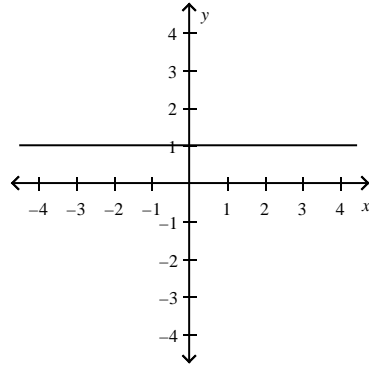
A. undefined
B. negative
C. positive
D. zero

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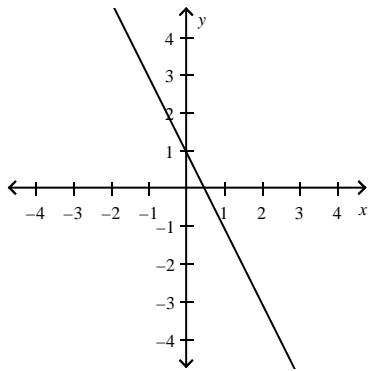

A. positive
B. zero
C. negative
D. undefined

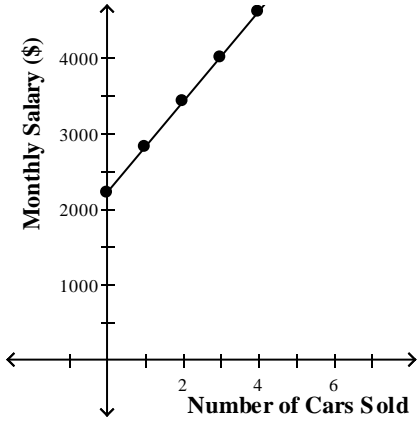**13.** Tell whether the slope of the line is positive, negative, zero, or undefined.

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 Sold	Monthly Salary Earned
0	$2200
1	$2800
2	$3400
3	$4000
4	$4600
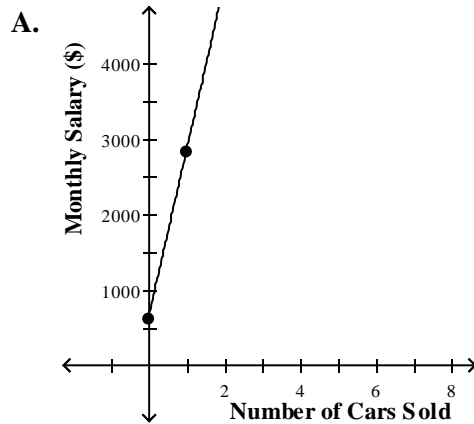
A.

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

B.

Monthly Salary ($) vs Number of Cars Sold

ThThe

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

C.

Monthly Salary ($) vs Number of Cars Sold

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

D.

Monthly Salary ($) vs Number of Cars Sold
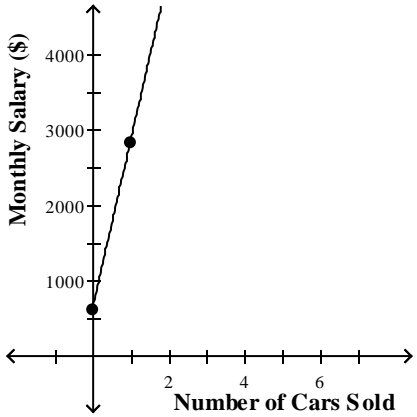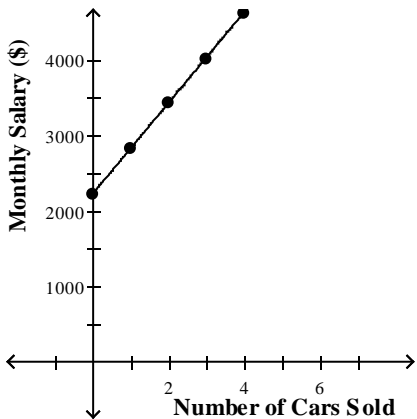
The slope of the line is   2200. This means that for every car Thomas sells, he earns $2200.

15. Find the slope of the table below.

x	y
-3	10
-1	4
1	-2

  A. -6
  B. -3
  C. 6
  D. 3

16. Find the slope of the table below.

x	y
-3	-2
-1	0
1	2

  A. -2
  B. 1
  C. -1
  D. 2

17. Find the slope of the table below.

x	y
-10	-1
0	1
10	3

  A. 5
  B. 1
  C. $\frac{1}{5}$
  D. 10

18. What is the value of x?

(0,10) (4,10)

(0,5) (x,5)

(0,0)

A. 1
B. 2
C. 3
D. 3.5

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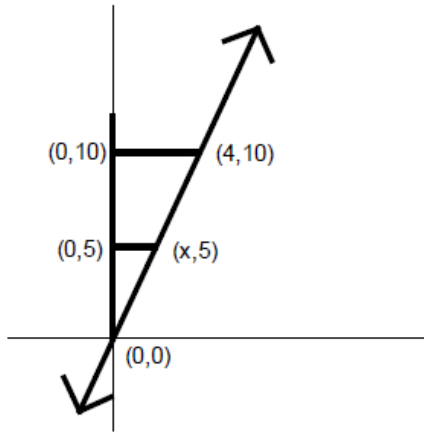
19. Which of the following is the STEEPEST slope?
A. m = -7
B. $m = \frac{1}{10}$
C. m = 5
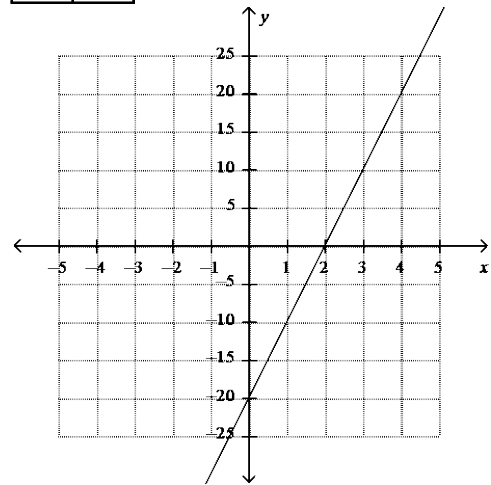D. m = 1

20. Which of the following is the STEEPEST slope?
A. m = 100

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.
C.

x	y
0	5
2	35
4	65

D.

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)**

Unit Test - Slope and Linear Graphs
Answer Section

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.