

Chapter 3 Practice Test

Multiple Choice

For each question, select the best answer.

1. The y -intercept for $y = \frac{-1}{7}x + 2$ is:

A -1
B 2
C 7
D $\frac{-1}{7}$

2. The slope and the y -intercept for $y = 0.45x - 0.25$ are:

A $m = 0.45, b = 0.25$
B $m = -0.45, b = -0.25$
C $m = -0.45, b = 0.25$
D $m = 0.45, b = -0.25$

3. The equation for the line with slope -3 and y -intercept 4 is:

A $y = -3x + 4$
B $y = -3x - 4$
C $y = -4x + 3$
D $y = -4x - 3$

4. The rate of change for $y = 9 - 2x$ is

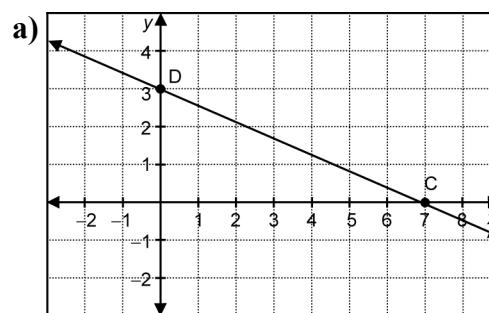
A 2
B 9
C -9
D -2

5. The equation of the line through $A(-1, -3)$, $B(0, -1)$ is

A $y = -2x + 1$
B $y = 2x + 1$
C $y = -2x - 1$
D $y = 2x - 1$

Short Response

6. Determine the rise and the run then calculate the slope of the line segment.



7. On grid paper, graph each linear relation.

a) $y = 5 - x$
b) $y = -9x$
c) $y = x$
d) $y = x + 4$

8. Refer to your graphs from question 7.

a) Identify the lines that have a positive slope.
b) Identify the lines that have a negative slope.
c) Identify the y -intercept of each line.
d) Write an equation for a line that is parallel to each line.

9. a) Determine whether the lines represented by the tables of values are parallel.

x	y
0	-5
1	-10
2	-15
3	-20

x	y
0	0
1	-1
2	-2
3	-3

b) Write an equation for each line.

10. Solve for the values of y , given the values of x .

a) $y = -0.25x$, when $x = -4$ and $x = 8$
b) $y = 5 - 3x$, when $x = -1$ and $x = 0$

Name: _____

Date: _____

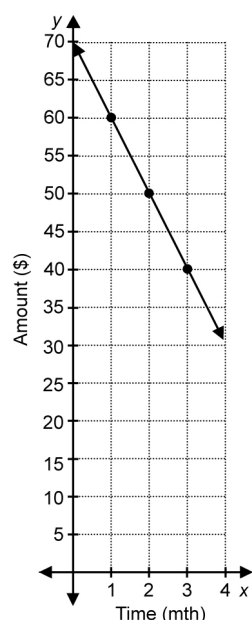
11. Write an equation for the line passing through each pair of points.

- a) $C(0, -4)$, $D(-5, -14)$
 b) $E(4, -2)$, $F(-5, 7)$

12. Determine the equation of the line given the slope and the coordinates of one point on the line.

- a) $m = -2$, $N(0, -1)$
 b) $m = 0.25$, $G(0, 2)$

13. Katharine's parents gave her \$70 to spend on school supplies throughout the school year. She spends about \$10 on school supplies each month. The graph shows the amount of money she has left over time.



- a) Determine the slope of the line.
 b) Identify the y -intercept.
 c) Write an equation that represents the amount of money Katharine has each month.
 d) How many months until Katharine has \$0 left?

Extended Response

14. Warren makes a 10% commission on every pair of shoes he sells. Each pair of shoes costs about \$80.

- a) Complete the table.

Pairs of Shoes Sold	Earnings (\$)
0	0.00
1	
2	
3	
4	

- b) Determine the rate of change in Warren's earnings for each pair of shoes sold.
 c) Graph the data from the table.
 d) Write an equation to represent the earnings made for each pair of shoes sold.
 e) How many pairs of shoes does Warren have to sell in order to earn a commission of \$96.