Name: _____ Hour: _____ Date: _____

SLOPE W.S.

1. Find the slope of the line that passes through the points (- 3, 4) and (5, 7).

   a. 38

   b. 32

   c. 83

   d. 211

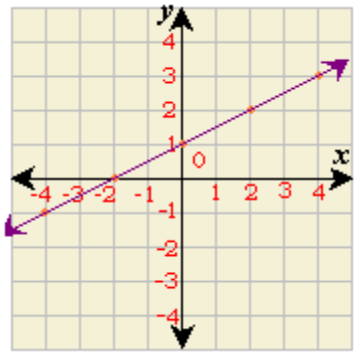
Solution:

m = y2-y1x2-x1
Slope of a line passing through two points, m = Difference between the y-coordinatesDifference between the x-coordinates
[Formula.]

= (7-4)(5-(-3))
[Substitute $(x_1, y_1) = (- 3, 4)$ and $(x_2, y_2) = (5, 7)$.]

= 38

2. The slope of the line in the graph is



   a. negative

   b. positive

   c. zero

   d. undefined

Solution:

The line in the graph is rising from left to right.

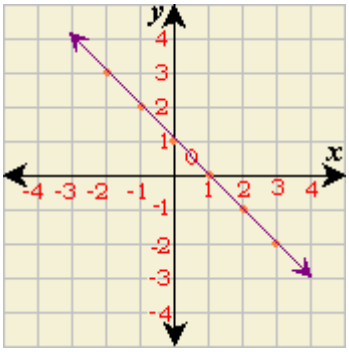
The line with a positive slope rises from left to right.

So, the slope of the line in the graph is positive.

Correct answer : (2)

3.

The slope of the line in the graph is



a. negative

b. positive

c. undefined

d. zero

Solution:

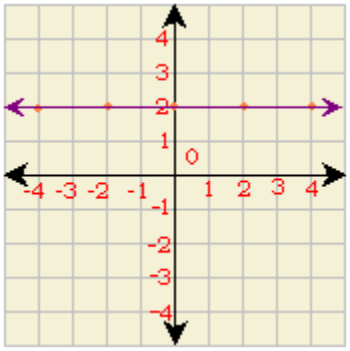
The line in the graph is falling from left to right.

The line with a negative slope falls from left to right.

So, the slope of the line in the graph is negative.

Correct answer : (1)

4. The slope of the line in the graph is



a. undefined

b. negative

c. positive

d. zero

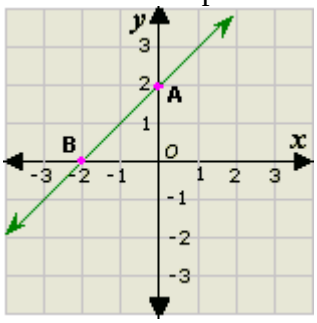
Solution:

The line in the graph is horizontal.

Slope = rise / run. The rise in the line is zero.

So, the slope of the line in the graph is zero.

6. Find the slope of the line AB in the graph.



a. - 1

b. 1

c. - 2

Solution:

The coordinates of the point A are (0, 2) and coordinates of the point B are (- 2, 0).

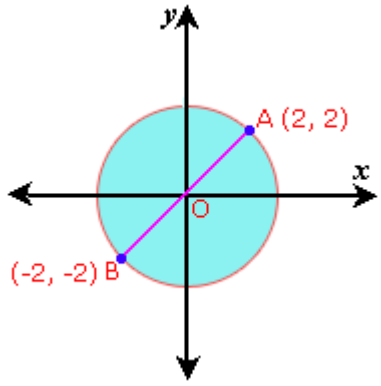
Slope = Change in yChange in x
[Formula.]

= 2 - 00 - (- 2)
[Substitute values.]

= 22 = 1
[Simplify.]

The slope of the line AB is 1.

8. What is the slope of the diameter AB of the circle shown in the graph?



a. - 2
b. 1
c. - 1

Solution:

Let A(2, 2) be (x_1, y_1) and B(- 2, - 2) be (x_2, y_2).

Let m be the slope of the diameter.

m = y2-y1x2-x1

m = (-2-2)(-2-2)
[Substitute the values of x_1, y_1, x_2 and y_2.]

m = 1

The slope of the diameter AB is 1.