MATHEMATICS

Q.21- If x coordinate of a point is zero, then the point lies on:

Correct Response-2776/5426=51.16%

Ans- (d) Y-axis

Explanation- If x coordinate is 0, on visually observing a graph we can see that the point always lie on y axis. Irrespective of the y coordinate, the point whose x coordinate is 0 always lies on the y axis.

Q.22- A quadrant in which both x and y values are negative is

Correct Response-4067/5428=74.92%

Ans- (c) Third quadrant

Explanation- Quadrant III: Both x and y-coordinate are negative.

Q.23- Abscissa of all the points on the x-axis is

Correct Response-3859/5421=71.2%

Ans- (d) Any number

Explanation-

Q.24- The point of intersection of horizontal and vertical axes in a cartesian plane is called:

Correct Response-4216/5418=77.81%

Ans – (a) Origin

Explanation- The horizontal axis in the coordinate plane is called the x−axis. The vertical axis is called the y−axis. The point at which the two axes intersect is called the origin.

Q.25- Signs of the abscissa and ordinate of a point in the second quadrant are respectively

Correct Response-1579/5430=29.08%

Ans- (b) +,--

Explanation- Sign of ordinate and abscissa of a point in the second quadrant are positive and negative respectively.

Q.26- The solution of equation x-2y = 4 is:

Correct Response-2956/5414=54.6%

Ans- (c) 4,0

Explanation- Hence, (4, 0) is the required solution for the equation x - 2y = 4.

Q.27- Find the value of k, if x = 1, y = 2 is a solution of the equation 2x + 3y = k.

Correct Response-3044/5411=56.3%

Ans- (d) K=8

Explanation- Given: Linear equation 2x + 3y = k.

We can find the value of k by substituting the values of x and y in the given equation.

By substituting the values of x = 1 and y = 2 in the given equation

2x + 3y = k

$\Rightarrow$ 2(1) + 3(2) = k

$\Rightarrow$ 2 + 6 = k

$\Rightarrow$ Hence, k = 8

Therefore, the value of k is 8

Q.28- The graph of linear equation x+2y = 2, cuts the y-axis at:

Correct Response-2322/5392=43.06%

Ans – (c) (0,1)

Explanation-

Q.29- Any point on line x = y is of the form:

Correct Response-3240/5418=59.8%

Ans-(d) (k,k)

Explanation-

Equation of line is x=y

In the given options , (k,k) satisfies the given equation x = y.
That is k = k.

Hence, (k,k) is the point on the line x = y.

Q.30- Equation, y = mx + c, m is:

Correct Response-1268/5441=23.3%

Ans- (b) Slope

Explanation-

The equation y = mx + c is the general equation of any straight line where m is the gradient of the line (how steep the line is) and c is the y -intercept (the point in which the line crosses the y -axis).