

# WANDOOR GANITHAM - S S L C UNIT TEST 2021

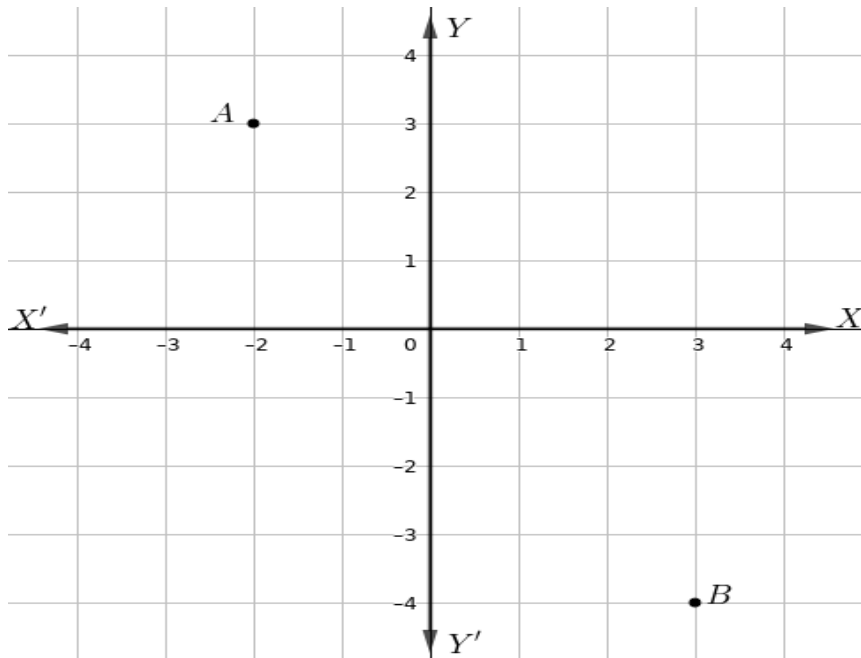
5.06BE

## COORDINATES

Total Score : 20

Time : 40 minutes

1. Write down the coordinates of the points A and B from the figure .



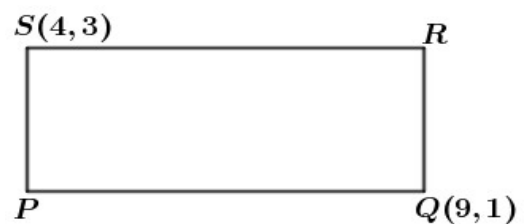
(2)

2. a) What is the  $x$ -coordinate of any point on the  $y$  axis ?

b) Write down the coordinates of a point on a line parallel to the  $y$ -axis passing through the point  $(5, 3)$  ?

(2)

3. In the figure the sides of the rectangle PQRS are parallel to the axes .



a) Write down the coordinates of P ?

b) Write down the coordinates of R ?

(2)

4. A circle of radius 10 is drawn with origin as centre.

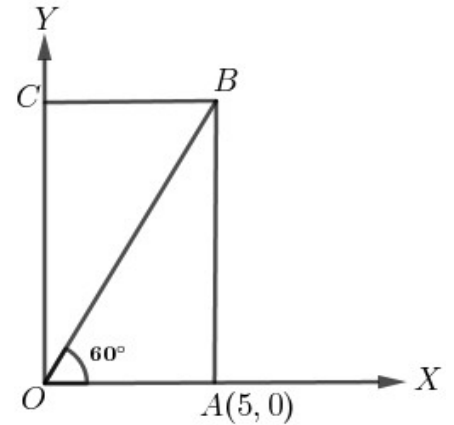
a) Write down the coordinates of a point at which the circle cuts the  $x$ -axis ?

b) Write down the coordinates of a point at which the circle cuts the  $y$ -axis ?

c) If  $(m, n)$  is a point on this circle, prove that  $m^2 + n^2 = 100$  ?

(3)

5. In the figure OABC is a rectangle . Coordinates of the vertex A are  $(5, 0)$  .  $\angle AOB = 60^\circ$



(3)

6. The coordinates of the vertices of the triangle ABC are A  $(1, 3)$  , B  $(6, 2)$  and C  $(4, 5)$

a) What is the length of AB ?

b) What is the length of BC ?

c) Prove that ABC is an isosceles triangle ?

(4)

7. a) Draw the coordinate axes and mark the following points .

A  $(2, 4)$  , B  $(-1, 3)$  , C  $(-1, -1)$  , D  $(2, -3)$  ?

b) What is the most suitable name of the quadrilateral ABCD ?

(4)