



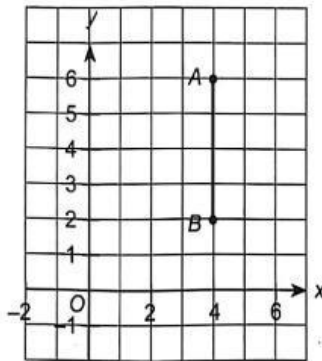
Koordinat Coordinates

Bahagian A/Section A

7.1 Jarak dalam Sistem Koordinat Cartes Distance in a Cartesian Coordinate System

1 Rajah 1 menunjukkan dua titik, A dan B pada suatu satah Cartes.

Diagram 1 shows two points, A and B on a Cartesian plane.



Rajah 1/Diagram 1

Cari jarak di antara titik A dengan B.
Find the distance between points A and B.

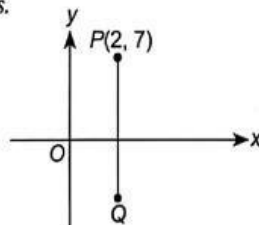
A 6 unit/units C 2 unit/units
B 4 unit/units D 0 unit/unit

2 Cari jarak di antara titik (7, 0) dengan (-7, 0).
Find the distance between the coordinates (7, 0) and (-7, 0).

A -7 unit/units C 7 unit/units
B 0 unit/unit D 14 unit/units

3 Rajah 2 menunjukkan garis lurus PQ adalah selari dengan paksi-y.

Diagram 2 shows a straight line PQ that is parallel to the y-axis.



Rajah 2/Diagram 2

Diberi jarak PQ ialah 10 unit, cari koordinat titik Q.

Given that the distance of PQ is 10 units, find the coordinates of point Q.

A (2, 17) C (12, 7)
B (2, -3) D (-3, 2)

7.2 Titik Tengah dalam Sistem Koordinat Cartes Midpoint in the Cartesian Coordinate System

4 Rajah 3 menunjukkan langkah pengiraan Aimi untuk mencari titik tengah bagi pasangan titik P(3, -5) dan Q(7, -1). Cikgu Farah mendapati pengiraan Aimi itu tidak lengkap.

Diagram 3 shows the steps in Aimi's working to find the midpoint between the points P(3, -5) and Q(7, -1). Teacher Farah noticed that the working was incomplete.

$$\begin{aligned} \text{Titik tengah} &= \left(\frac{3+7}{2}, \quad \right) \\ \text{Midpoint} &= (5, -3) \end{aligned}$$

Rajah 3/Diagram 3

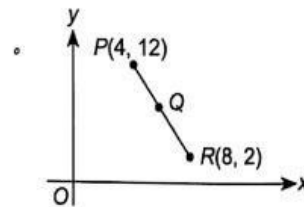
Antara berikut, yang manakah langkah pengiraan yang Aimi tertinggal?

Which of the following steps is left out by Aimi?

- A $\frac{-5+3}{2}$
B $\frac{-5+1}{2}$
C $\frac{-5+(-3)}{2}$
D $\frac{-5+(-1)}{2}$

5 Dalam Rajah 4, Q ialah titik tengah bagi garis lurus PR.

In Diagram 4, Q is the midpoint of the straight line PR.



Rajah 4/Diagram 4

Cari koordinat titik Q.

Find the coordinates of point Q.

- A (5, 7)
B (6, 7)
C (7, 6)
D (8, 6)

7.3 Sistem Koordinat Cartes
The Cartesian Coordinate System

6 Antara titik berikut, yang manakah terletak pada paksi- x ?

Which of the following points is located on the x -axis?

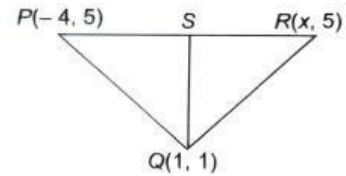
- A (3, 2) C (0, 5)
B (-2, 0) D (5, -5)

7 Satu garis lurus melalui titik $(-5, 1)$ dan titik $(4, -5)$. Antara titik berikut, yang manakah terletak pada garis lurus itu?

A straight line passes through point $(-5, 1)$ and point $(4, -5)$. Which of the following points lies on the straight line?

- A (-3, 0) C (0, -3)
B (-2, -1) D (3, -3)

8 Rajah 5 menunjukkan sebuah segi tiga sama kaki PQR . S ialah titik tengah bagi garis lurus PR . Diagram 5 shows an isosceles triangle PQR . S is the midpoint of the straight line PR .



Rajah 5/Diagram 5

Diberi bahawa koordinat titik P , Q dan R masing-masing ialah $(-4, 5)$, $(1, 1)$ dan $(x, 5)$. Tentukan nilai x .

It is given that the coordinates of points P , Q and R are $(-4, 5)$, $(1, 1)$ and $(x, 5)$ respectively. Determine the value of x .

- A 5 C 7
B 6 D 10