

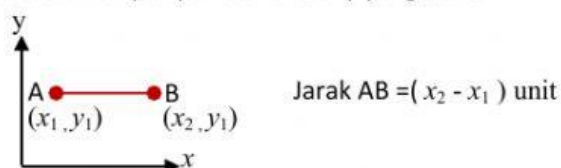
7.1.2. Rumus jarak antara dua titik pada satah

1. Lengkapkan jadual berikut

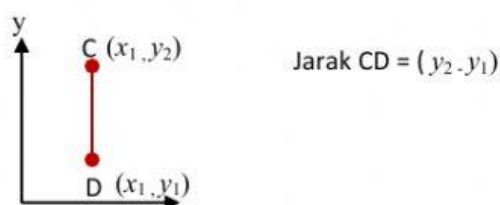
Koordinat		Koordinat yang sama	Jarak
A (2 , 1)	B (2 , 4)	Koordinat x	$4 - 1 = 3$ unit
C (- 1 , 3)	D (7 , 3)		
E (6 , 5)	F (6 , - 5)		
G (- 7 , 2)	H (1 , 2)		

Berdasarkan jadual ,jarak dapat ditentukan sekiranya

i. dua titik mempunyai koordinat $-y$ yang sama

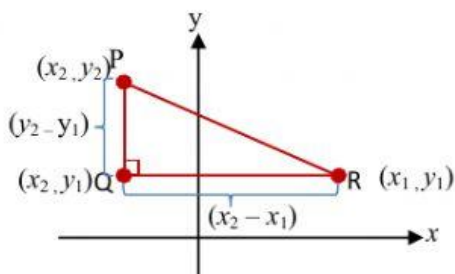


ii. Dua titik mempunyai koordinat $-x$ yang sama.



2. Lengkapkan rajah berikut berdasarkan pilihan jawapan yang diberi untuk menerbitkan rumus jarak

$$(y_2 - y_1)^2 \quad y_2 - y_1 \quad (x_2 - x_1)^2 \quad y_2 - y_1$$



$$\text{Jarak } QR = x_2 - x_1$$

$$\text{Jarak } PQ = \underline{\hspace{2cm}}$$

Menggunakan teorem Pythagoras

$$\begin{aligned} PR^2 &= PQ^2 + QR^2 \\ &= (x_2 - x_1)^2 + (\underline{\hspace{2cm}})^2 \end{aligned}$$

$$PR = \sqrt{\underline{\hspace{2cm}} + \underline{\hspace{2cm}}}$$

7.1.3 Jarak di antara dua titik pada satah

Hitung jarak di antara pasangan titik berikut

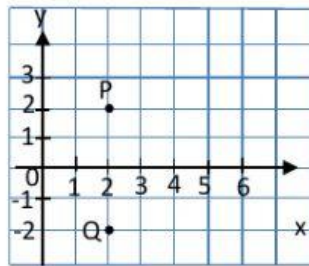
a. $A(1, 3)$ dan $B(1, 7)$

$$AB = \underline{\hspace{1cm}} - \underline{\hspace{1cm}} = \underline{\hspace{1cm}} \text{ unit}$$

b. $C(5, -2)$ dan $D(-2, -2)$

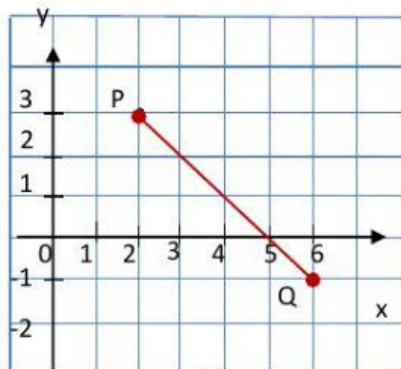
$$CD = \underline{\hspace{1cm}} - (\underline{\hspace{1cm}}) = \underline{\hspace{1cm}} \text{ unit}$$

c.



$$PQ = 2 - (\underline{\hspace{1cm}}) = \underline{\hspace{1cm}} \text{ unit}$$

d.



$$\begin{aligned} PQ &= \sqrt{(\underline{\hspace{1cm}})^2 + [(3 - (-1))]^2} \\ &= \sqrt{\underline{\hspace{1cm}}^2 + \underline{\hspace{1cm}}^2} \\ &= \sqrt{\underline{\hspace{1cm}}} \\ &= \underline{\hspace{1cm}} \text{ unit} \end{aligned}$$