Assignment No.1

Suyog Tangade

Download all python codes from

https://github.com/suyogtangade/AI.git

and latex-tikz codes from

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1 Question No.16(b) (cbse/2006/set-2)

Find the co-ordinates of the point equidistant from three given points $A(5,3), B(5,-5)$ and $C(1,-5)$.

2 Solution

Let the coordinates of the point $P(x,y)$ be equdistant from $A(5,3)$, $B(5,-5)$ and$C(1,-5)$
$PA = PB$
$PA2 = PB2$

$$(x-5)2 + (y-3)2 = (x-5)2 + (y+5)2 \quad (2.0.1)$$

$$(y-3)2 = (y+5)2 \quad (2.0.2)$$

Solving these two equation we get $y = -1$

Also, $PA = PC$

$PA2 = PC2$

solving this equation using $y = -1$ we get $x = 3$

Hence, the coordinates of a point

$$P(x,y) = P(3,-1)$$