

AI1110 assignment1(ICSE Class 10 2017)

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1 question (7b):

Use a graph paper for this question(Take 2 cms = 1 unit on both x and y axis)

(i) Plot the following points: A(0,4), B(2,3), C(1,1) and D(2,0).

(ii) Reflect points B, C, D on the y-axis and write down their coordinates. Name the images as B', C', D' respectively.

(iii) Join the points A, B, C, D, D', C', B' and A in order, so as to form a closed figure. Write down the equation of the line of symmetry of the figure formed.

2 Solution:

(i) the plot of all points in last section labeled with A,B,C,D

(ii) As for the reflection of points B,C,D gives B',C',D' with either the coordinate geometry image formula or we can just multiply '-1' with x coordinates and get new x-coordinates ie B'(-2,3) C'(-1,1) D'(-2,0)

(iii) joining the points in order A, B, C, D, D', C', B' and A gives a polygon which is shown below.
As reflection of B,C,D are B',C',D' wrt y-axis it can be said that $x=0$ is the equation of the line of symmetry.

3 PLOT:

Here B' is reflection of B wrt to y-axis($x=0$)

C' is reflection of B wrt to y-axis($x=0$)

D' is reflection of B wrt to y-axis($x=0$)

Line of symmetry has equation $x=0$.

