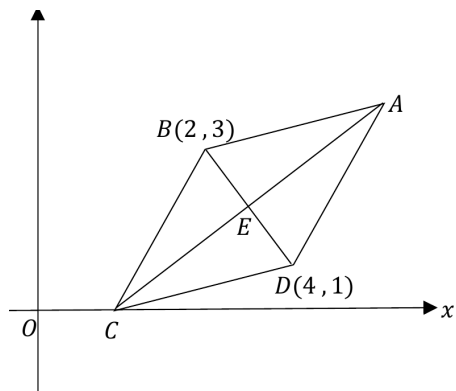


## Question 1

The diagram shows a rhombus  $ABCD$  in which  $B$  is  $(2, 3)$ ,  $D$  is  $(4, 1)$  and  $C$  lies on the  $x$ -axis. The diagonals  $AC$  and  $BD$  meet at  $E$ .



Find

- (a) the equation of  $AC$
- (b) the coordinates of  $A$  and of  $C$
- (c) the area of the rhombus  $ABCD$  and hence, find the perpendicular distance from  $C$  to  $AB$ .