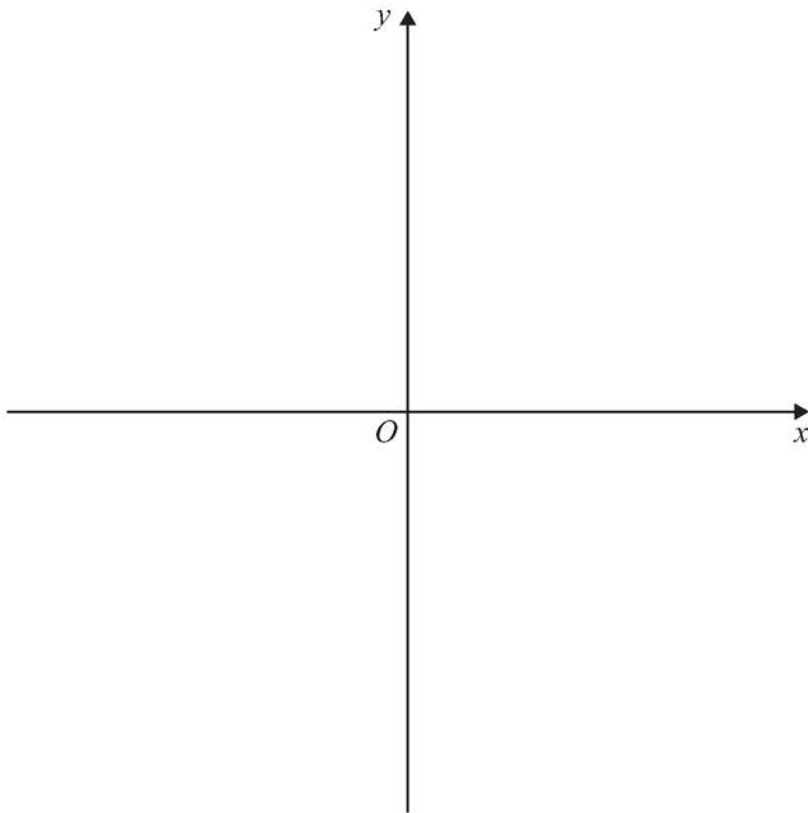


5 (a) Sketch the curve

$$y = (x - a)^2(3 - x) \quad \text{where } 0 < a < 3$$

indicating the coordinates of the points where the curve and the axes meet.

[4 marks]



5 (b) Hence, solve

$$(x - a)^2(3 - x) > 0$$

giving your answer in set notation form.

[2 marks]