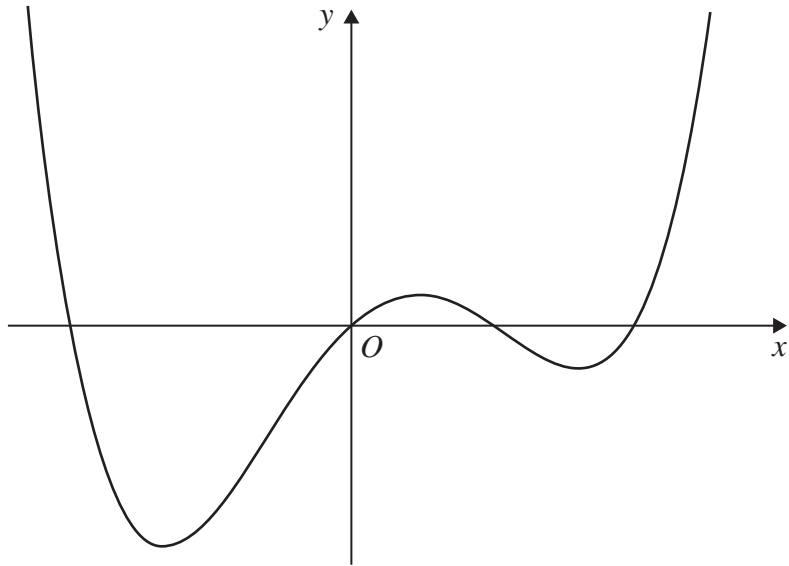


8.



**Figure 4**

Figure 4 shows a sketch of the curve with equation  $y = f(x)$

(a) Write down the number of distinct roots of the equation

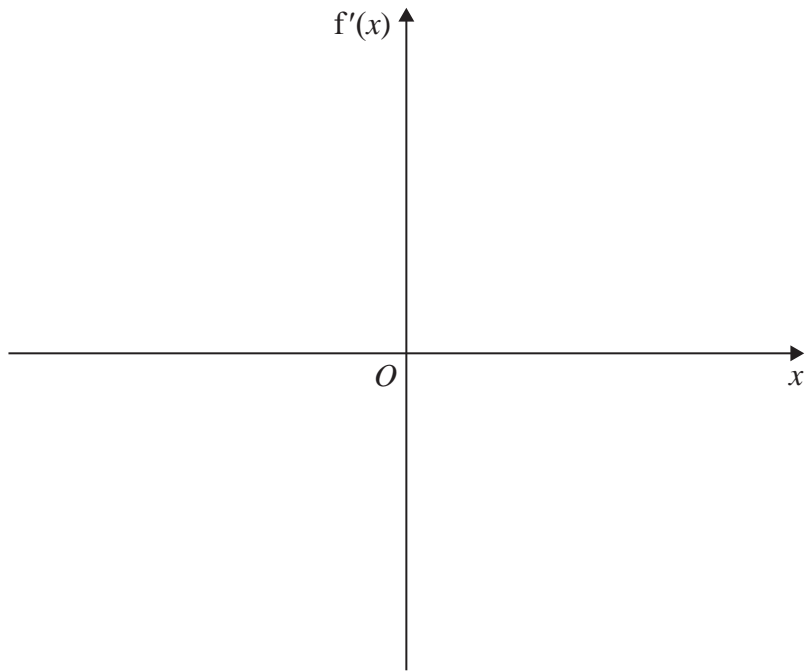
(i)  $f(x) = 0$

(ii)  $f'(x) = 0$

(2)

(b) On Diagram 1, sketch the graph of  $y = f'(x)$

(3)



**Diagram 1**