

**Question 5**

**(25 marks)**

(a) Solve the equation  $x = \sqrt{x+6}$ ,  $x \in \mathbb{R}$ .

(b) Differentiate  $x - \sqrt{x+6}$  with respect to  $x$ .

(c) Find the co-ordinates of the turning point of the function  $y = x - \sqrt{x+6}$ ,  $x \geq -6$ .

Page	Running
------	---------