

**Answer all TEN questions.**

**Write your answers in the spaces provided.**

**You must write down all the stages in your working.**

- 1** Given that  $\frac{a - \sqrt{48}}{\sqrt{3} + 1}$  can be written in the form  $b\sqrt{3} - 9$  where  $a$  and  $b$  are integers,

find the value of  $a$  and the value of  $b$   
Show your working clearly.

(4)

(Total for Question 1 is 4 marks)



P 7 1 8 1 8 A 0 3 2 8