Answer all ELEVEN questions.

Write your answers in the spaces provided.

You must write down all the stages in your working.

Given that $\frac{a+\sqrt{3}}{2-\sqrt{3}} = 11 + b\sqrt{3}$ where a and b are integers,

find the value of a and the value of b.

(4)

(Total for Question 1 is 4 marks)

