21 A bag contains n beads.
6 of the beads are red and the rest are blue.

Ravi is going to take at random 2 beads from the bag.

The probability that the 2 beads will be of the same colour is $\frac{9}{17}$

Using algebra, and showing each stage of your working, calculate the value of n.

DO NOT WRITE IN THIS AREA
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$n =$ .....

(Total for Question 21 is 6 marks)

Turn over for Question 22