Dr Oliver Mathematics
Worked Examples
Probability 2

From: Edexcel 2020 June Paper 2H (Calculator)

1. There are only red sweets and yellow sweets in a bag.

   There are n red sweets in the bag.
   There are 8 yellow sweets in the bag.

   Sajid is going to take at random a sweet from the bag and eat it.

   He says that the probability that the sweet will be red is $\frac{7}{10}$.

   (a) Show why the probability cannot be $\frac{7}{10}$. (3)

   After Sajid has taken the first sweet from the bag and eaten it, he is going to take at random a second sweet from the bag.

   Given that the probability that both the sweets he takes will be red is $\frac{3}{5}$,

   (b) work out the number of red sweets in the bag. (5)
       You must show all your working.