Health Science Pathway
Data and Statistics Module, worked example 1 – Probability

1. For every 100 European men, approximately how many will be an “anomolous trichromatic”?

   Answer: 7 out of every 100

2. Given that the daughter had two sons, what is the probability that neither child is colour blind?

   Answer:
   probability of being colour blind = 0.5
   probability of NOT being colour blind is also = 0.5
   probability of both sons NOT being colour blind = probability of one son not being colour blind, multiplied by probability of 2nd son not being colour blind
   = 0.5 × 0.5 = 0.25
   That is, 1 chance in 4 of having two sons with normal colour vision