

Challenge yourself

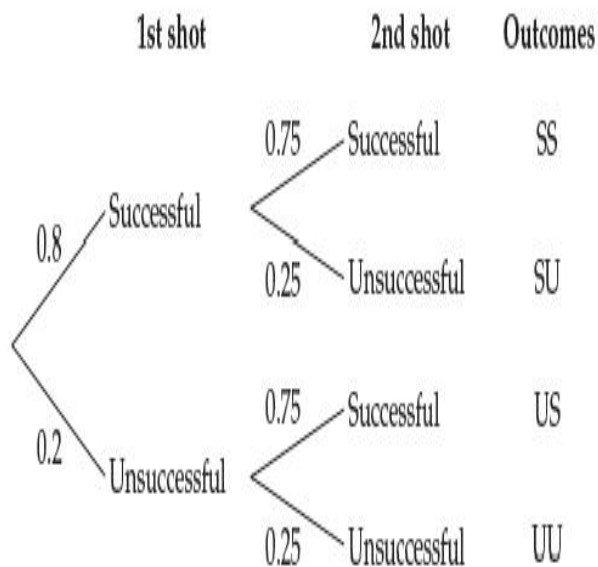
$P(\text{First shot}) = 0.8$ and $P(\text{Both shots}) = 0.6$.

The two shots are modelled as independent events, so $P(\text{Both shots}) = P(\text{First shot}) \times P(\text{Second shot})$.

Therefore $0.6 = 0.8 \times P(\text{Second shot})$

$$P(\text{Second shot}) = \frac{0.6}{0.8} = 0.75$$

You can now draw a tree diagram to show all the possible outcomes of two shots.



$$P(\text{At least one shot}) = 1 - P(\text{UU}) = 1 - 0.05 = 0.95$$