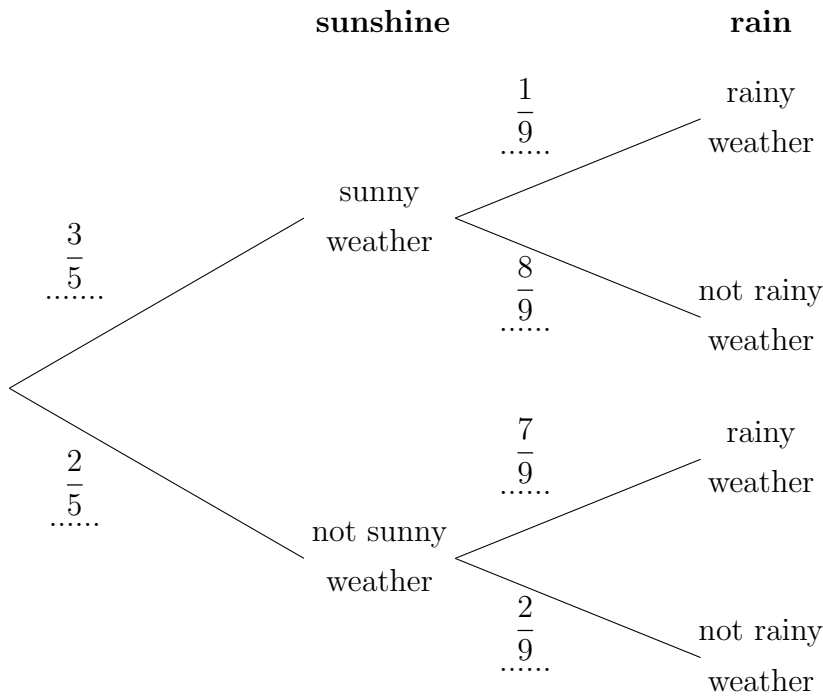


2. Nangila likes rainbows, she knows that rainbows occur when it is sunny and raining.

The probability that the next hour is sunny is $\frac{3}{5}$

If it is sunny the probability that there is rain in the next hour is $\frac{1}{9}$

If it is not sunny the probability that there is rain in the next hour is $\frac{7}{9}$



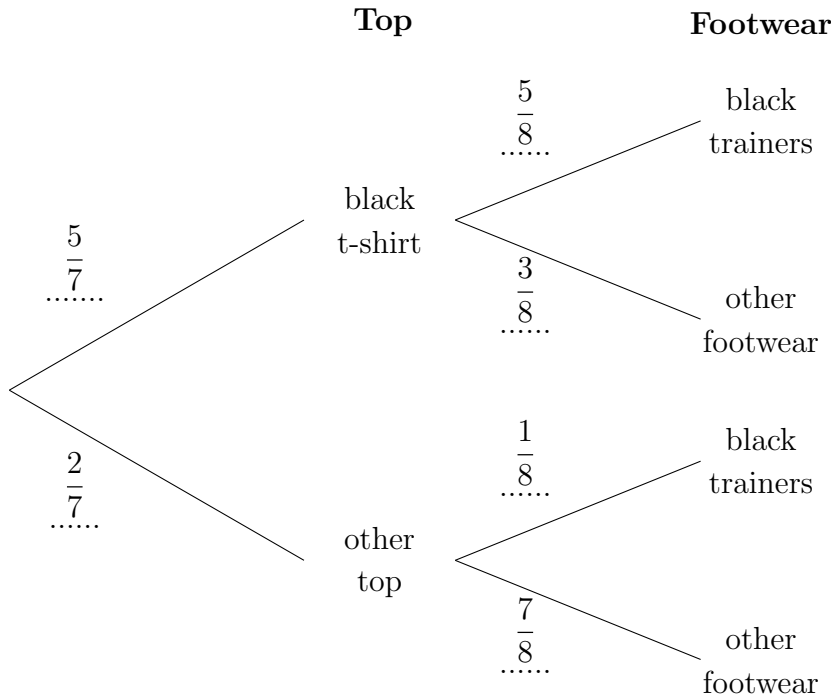
Work out the probability of there being no sun and no rain.

2.

3. The probability Ruby wears a black t-shirt is $\frac{5}{7}$

When Ruby wears a black t-shirt the probability she wears black trainers is $\frac{5}{8}$

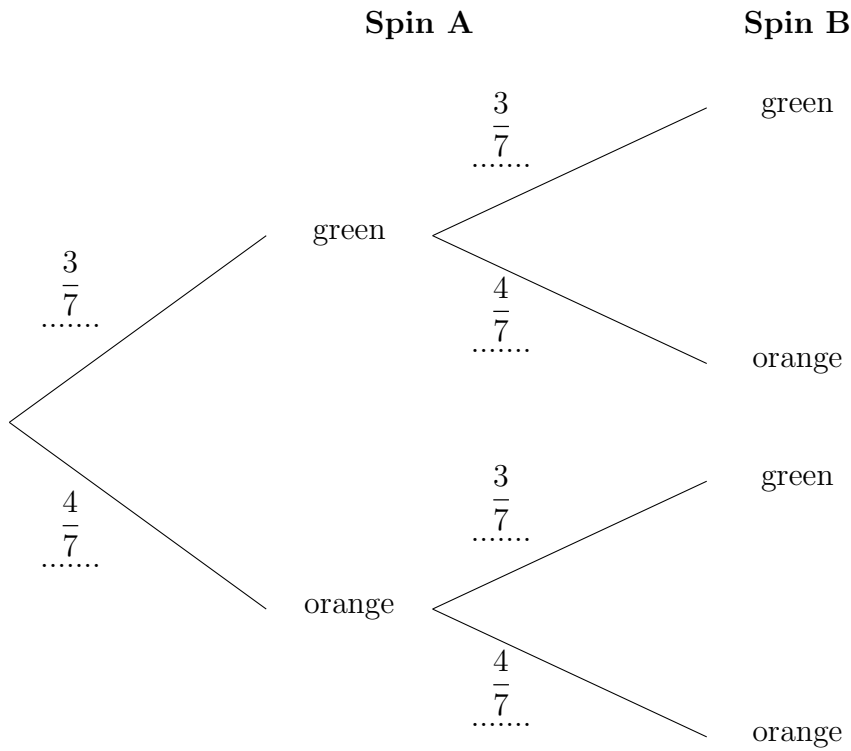
When Ruby doesn't wear a black t-shirt the probability she wears black trainers is $\frac{1}{8}$



Work out the probability of Ruby not wearing a black t-shirt and wearing black trainers.

3.

4. Renae spins a fair 7-sided spinner twice.
 3 of the spinners sides are coloured green.
 4 of the spinners sides are coloured orange.



Work out the probability of the spinner landing on orange the first time and green the second time.

4.

Answers

1. $\dots \frac{12}{35} \dots$
FYI: $\frac{4}{5} \times \frac{3}{7} M1$
2. $\dots \frac{4}{45} \dots$
FYI: $\frac{2}{5} \times \frac{2}{9} M1$
3. $\dots \frac{2}{56} \text{ or } \frac{1}{28} \dots$
FYI: $\frac{2}{7} \times \frac{1}{8} M1$
4. $\dots \frac{12}{49} \dots$
FYI: $\frac{4}{7} \times \frac{3}{7} M1$