

# Candle combos

This task is about possible outcomes, tree diagrams and probability.

Lynne had some candles in a box.  
 The height of each one was either tall or short.  
 The colour of each one was either yellow or red.

The probability of the **height** being:

- tall was  $\frac{1}{3}$
- short was  $\frac{2}{3}$

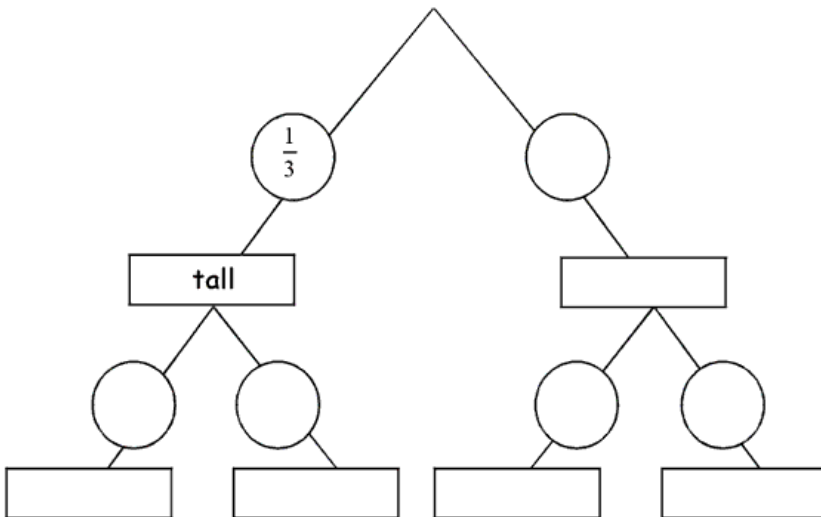
The probability of the **colour** being:

- yellow was  $\frac{1}{4}$
- red was  $\frac{3}{4}$



The tree diagram below illustrates the probabilities of all the different combinations of height and colour of the candles.

- a) Complete the tree diagram by filling in all the blank boxes and circles with the correct word or probability.  
 One probability and one word have been written in for you.



- b) A candle is chosen without looking. What is the probability that the candle is ...

- i) tall and yellow? \_\_\_\_\_
- ii) short and red? \_\_\_\_\_