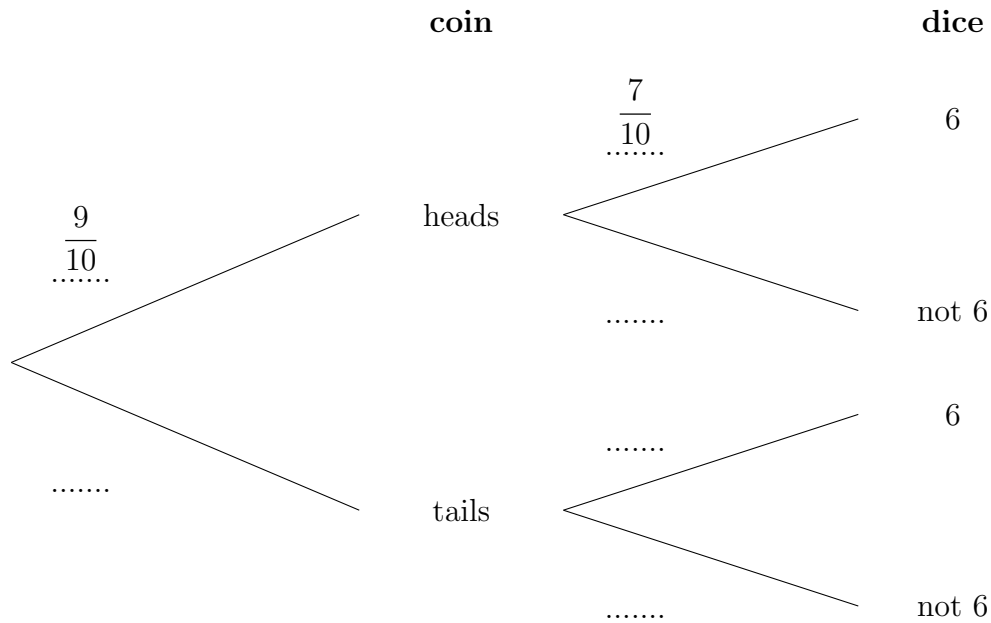


1. Bob throws a biased coin and then rolls a biased dice.

The probability that the biased coin is a head is $\frac{9}{10}$

The probability that the biased dice scores a six is $\frac{7}{10}$

(a) Complete the probability tree diagram.



(b) Work out the probability of Bob getting a head but not a 6

.....

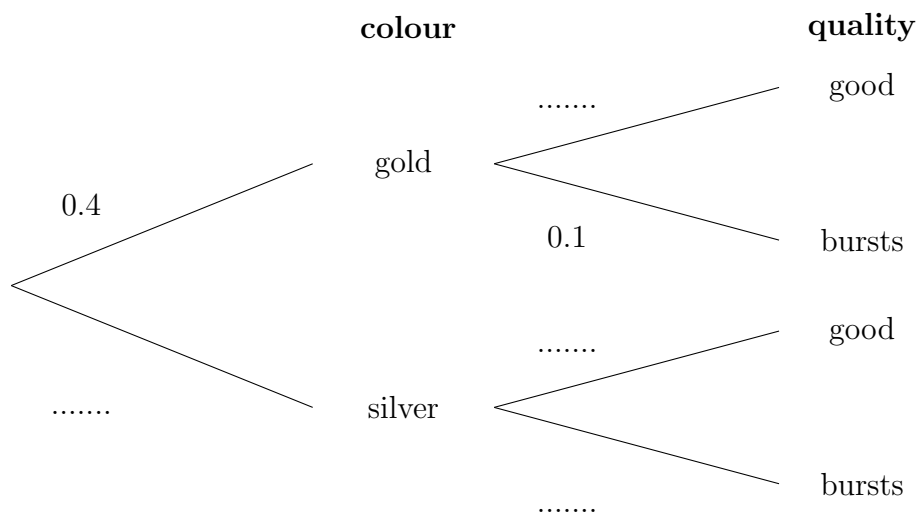
2. Addison selects a balloon at random from a packet.

The packet contains only gold and silver balloons.

The probability she selects a gold balloon is 0.4

The probability that a balloon bursts when she blows it up is 0.1

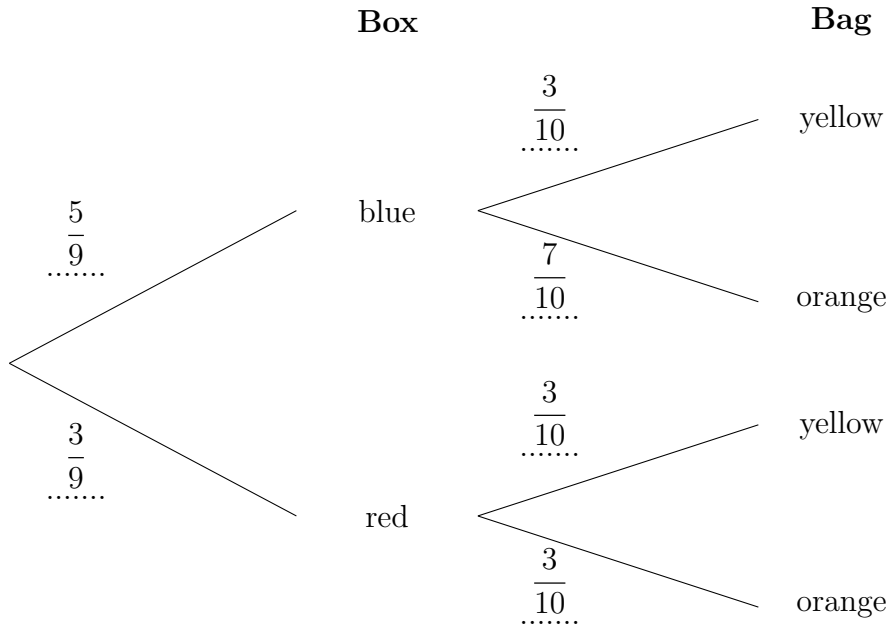
(a) Complete the probability tree diagram.



(b) Work out the probability of Addison blowing up a good silver balloon.

.....

3. Ibrahim has a box containing 5 blue and 3 red counters.
 He also has a bag containing 3 yellow and 7 orange counters.
 Ibrahim takes at random one counter from the box.
 Ibrahim takes at random one counter from the bag.
 He draws this probability tree diagram.
 The diagram is **not** correct.



Write down **two** things wrong with the probability tree diagram.

1.

2.

(1)

- $\frac{7}{10}$
- $\frac{9}{10}$
- $\frac{3}{10}$
- $\frac{7}{10}$
- $\frac{1}{10}$
- $\frac{3}{10}$

(b) $\frac{27}{100}$

(2)

- 0.9
- 0.4
- 0.1
- 0.9
- 0.6
- 0.1

(b) 0.54

(3)

either blue: $\frac{5}{8}$ not $\frac{5}{9}$
 or red: $\frac{3}{8}$ not $\frac{3}{9}$
 orange: $\frac{7}{10}$ not $\frac{3}{10}$