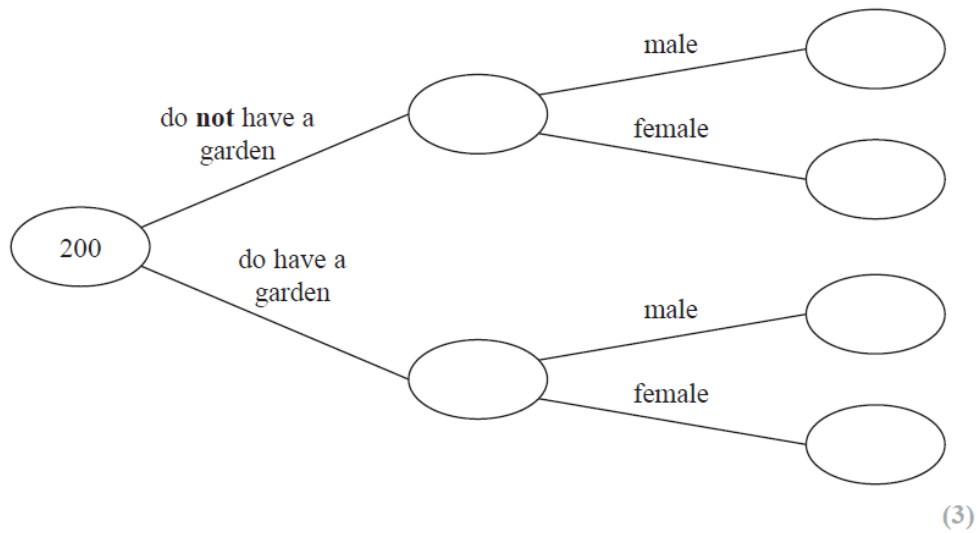**1** 200 people live in a village.

23 people do **not** have a garden.
10 males do **not** have a garden.
95 people are male.

(a) Use this information to complete the frequency tree.

(3)

One of the people who does **not** have a garden is chosen at random.

(b) Write down the probability that this person is female.
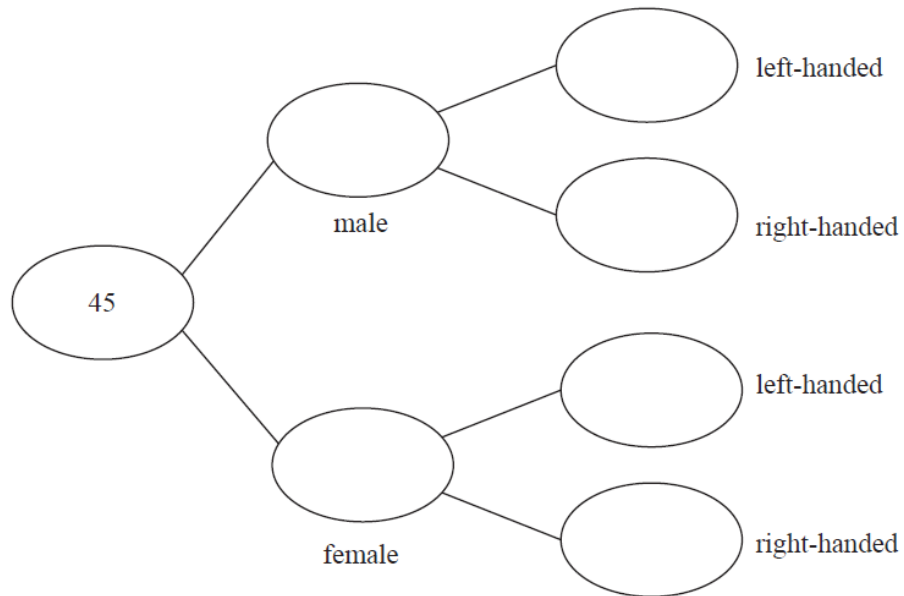
....

(2)

(Total for Question   is 5 marks)

2 Each worker in a factory is either left-handed or right-handed.

22 of the 45 workers are male.
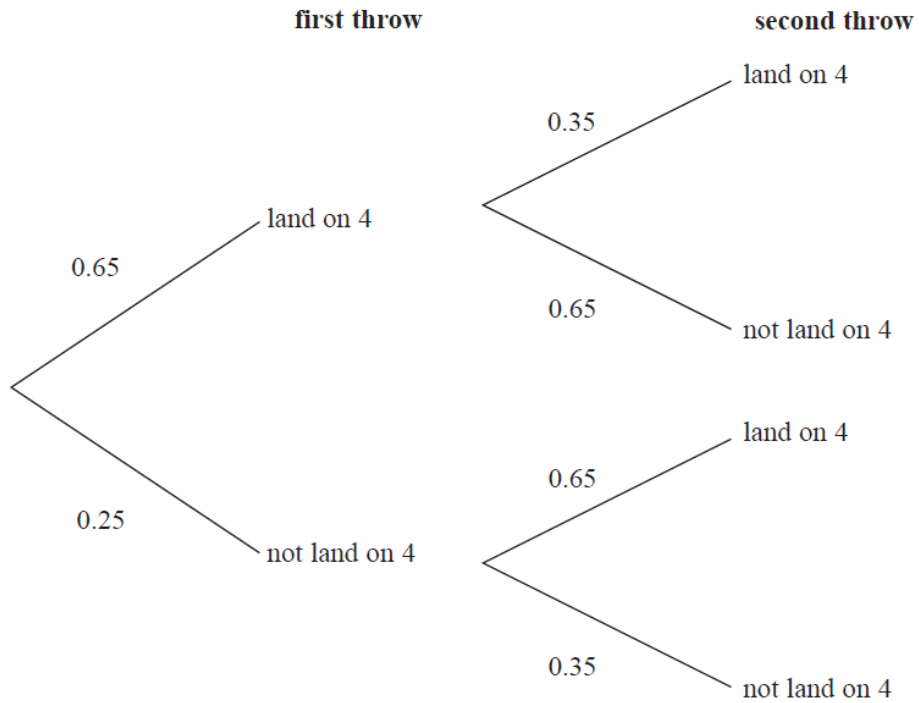16 of the 34 right-handed workers are female.

Complete the frequency tree for this information.

(Total for Question   is 3 marks)

3 When a biased 6-sided dice is thrown once, the probability that it will land on 4 is 0.65
   The biased dice is thrown twice.

   Amir draws this probability tree diagram.
   The diagram is **not** correct.

first throw   **second throw**

0.35 — land on 4

land on 4

0.65

0.65 — not land on 4

0.25

not land on 4

0.65 — land on 4

0.35 — not land on 4

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

1...

....

2...

....
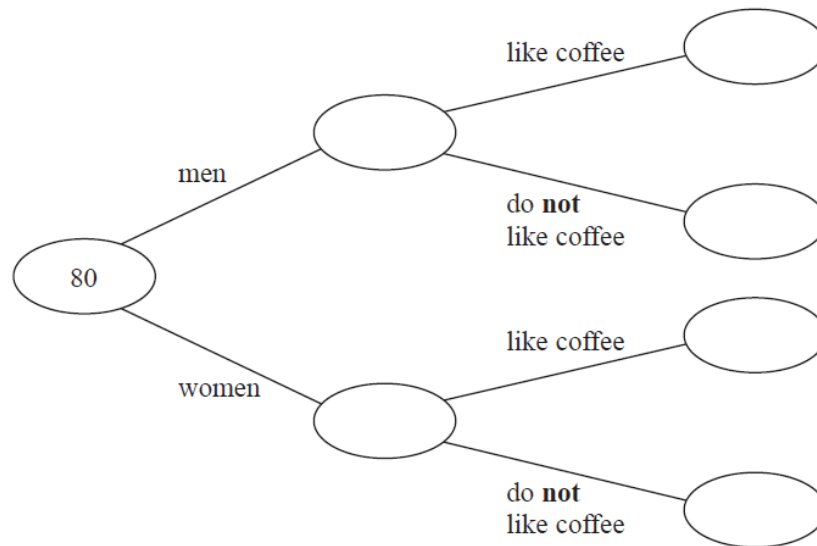
(Total for Question   is 2 marks)

4 80 people are asked if they like coffee.

48 of these people are women.
61 of the 80 people like coffee.
8 of the men do **not** like coffee.

(a) Use this information to complete the frequency tree.

(3)

One of the people who like coffee is chosen at random.

(b) Find the probability that this person is a woman.

(2)

(Total for Question   is 5 marks)
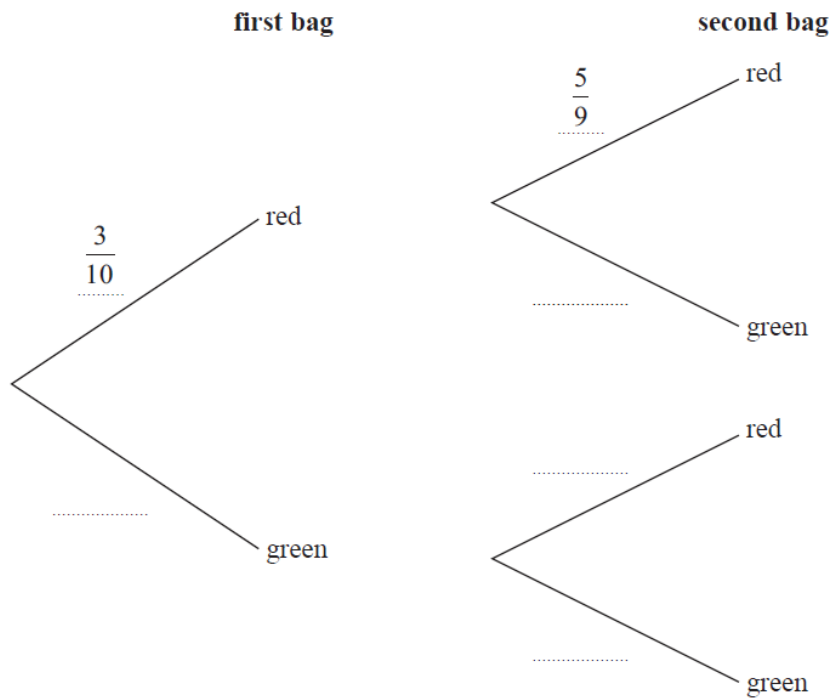
5 Amina has two bags.

In the first bag there are 3 red balls and 7 green balls.
In the second bag there are 5 red balls and 4 green balls.

Amina takes at random a ball from the first bag.
She then takes at random a ball from the second bag.
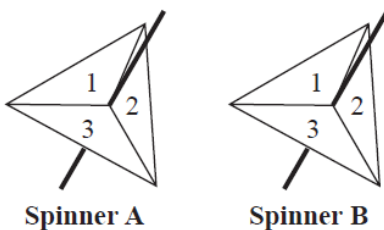
(a) Complete the probability tree diagram.

first bag

second bag

$\frac{5}{9}$ red

$\frac{3}{10}$ red

green

green

red

green

(2)

(b) Work out the probability that Amina takes two red balls.

(2)

(Total for Question   is 4 marks)

6 Amanda has two fair 3-sided spinners.

Spinner A   **Spinner B**

Amanda spins each spinner once.

(a) Complete the probability tree diagram.

Spinner A   **Spinner B**

.... — lands on 2

lands on 2

....

.... — does **not** land
on 2

.... — lands on 2

does **not** land
on 2

....

.... — does **not** land
on 2

(2)
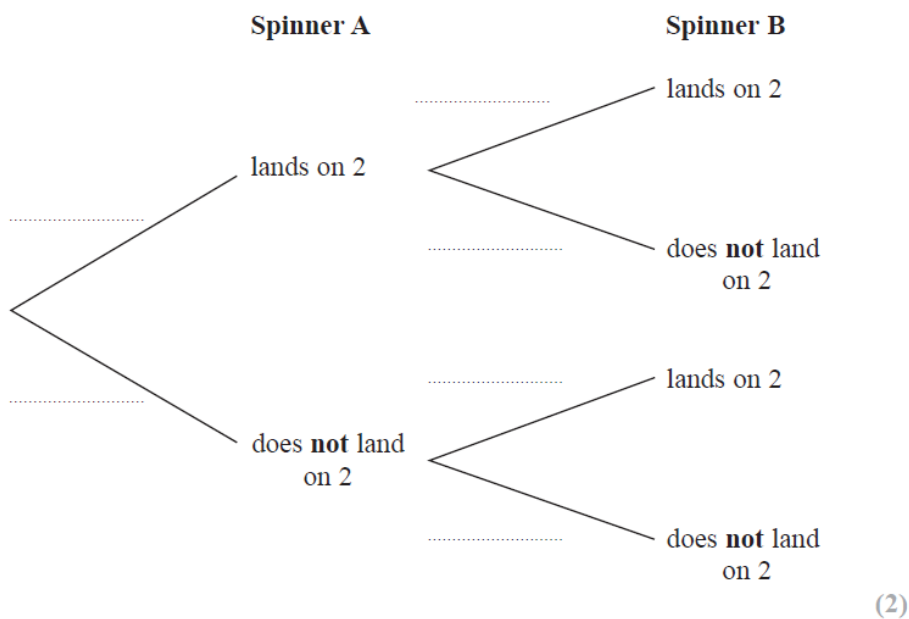
(b) Work out the probability that Spinner A lands on 2 and Spinner B does **not** land on 2

....

(2)

(Total for Question   is 4 marks)