

Topic test 4 (20 minutes)

Probability – Foundation (Calculator)

1 90 students take a test.

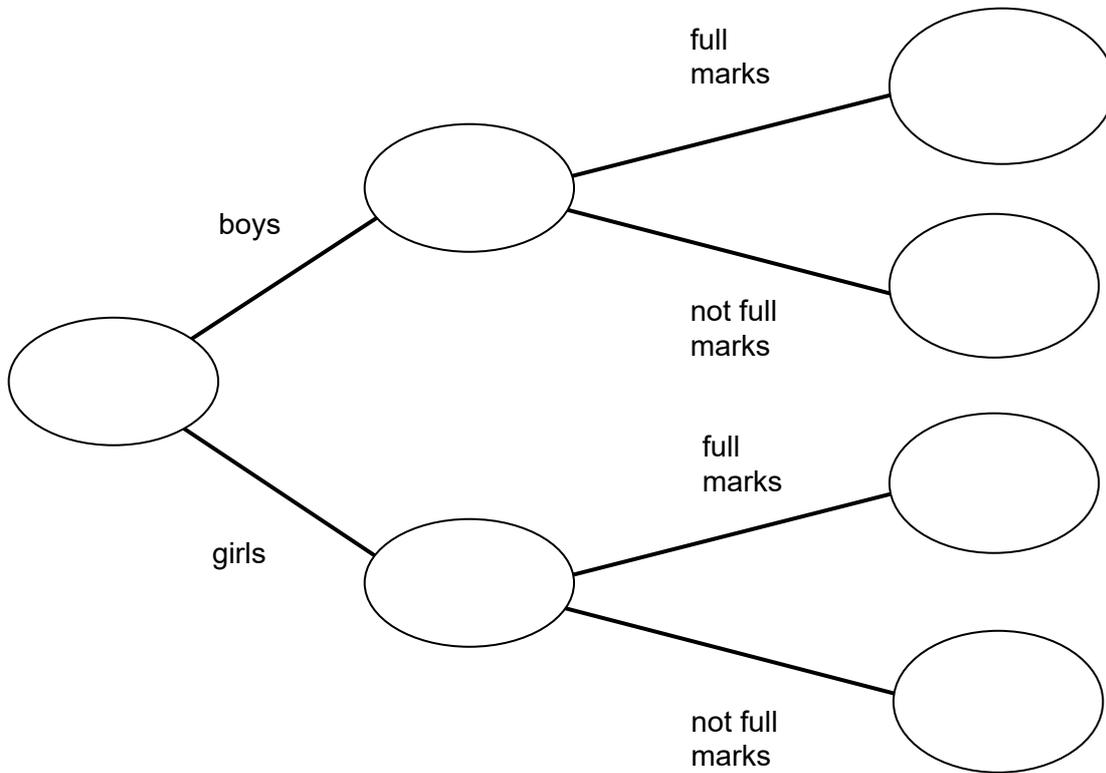
The ratio of boys to girls is 3 : 2.

One third of the boys score full marks.

The number of girls scoring full marks is half the number who do **not** score full marks.

1 (a) Complete the frequency tree.

[3 marks]



1 (b) A student is chosen at random.

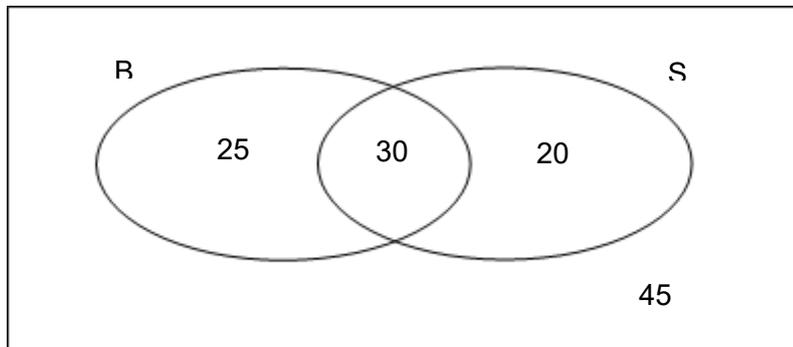
What is the probability it is a girl who did **not** get full marks?

Give your answer as a fraction in its simplest form.

[2 marks]

Answer _____

- 2 A farmer collects some eggs from his hens one morning.
The eggs are either brown (B) or white and are sorted into small (S) and large sizes.
The Venn diagram shows the results.



Two eggs are chosen at random.

- 2 (a) Work out the probability that the first egg is large and white.

[2 marks]

Answer _____

- 2 (b) The first egg was small.

Work out the probability that the second egg is small.

[1 mark]

Answer _____

-
- 3** A large park has thousands of flowers. The flowers are pink, yellow or blue.
55% of the flowers are pink and the ratio of yellow to blue flowers is 2 : 1

- 3 (a)** Complete the table to show the relative frequency of each colour of flower in the park. **[3 marks]**

Flower colour	Yellow	Pink	Blue
Relative frequency			

- 3 (b)** Bees visit the flowers to get pollen to make honey.
The probability that flowers are visited by a bee are shown.

Flower colour	Yellow	Pink	Blue
Probability of being visited by a bee	0.6	0.3	0.75

- Produce a tree diagram in the space below to show all the information from (a) and (b) **[5 marks]**

END OF QUESTIONS