
Topic Test 1 (20 minutes)

Basic probability - Higher

- 1 Temi rolls two fair, six-sided dice.
The two numbers rolled are added to give a total.

Work out the probability that the total is a single-digit prime number.

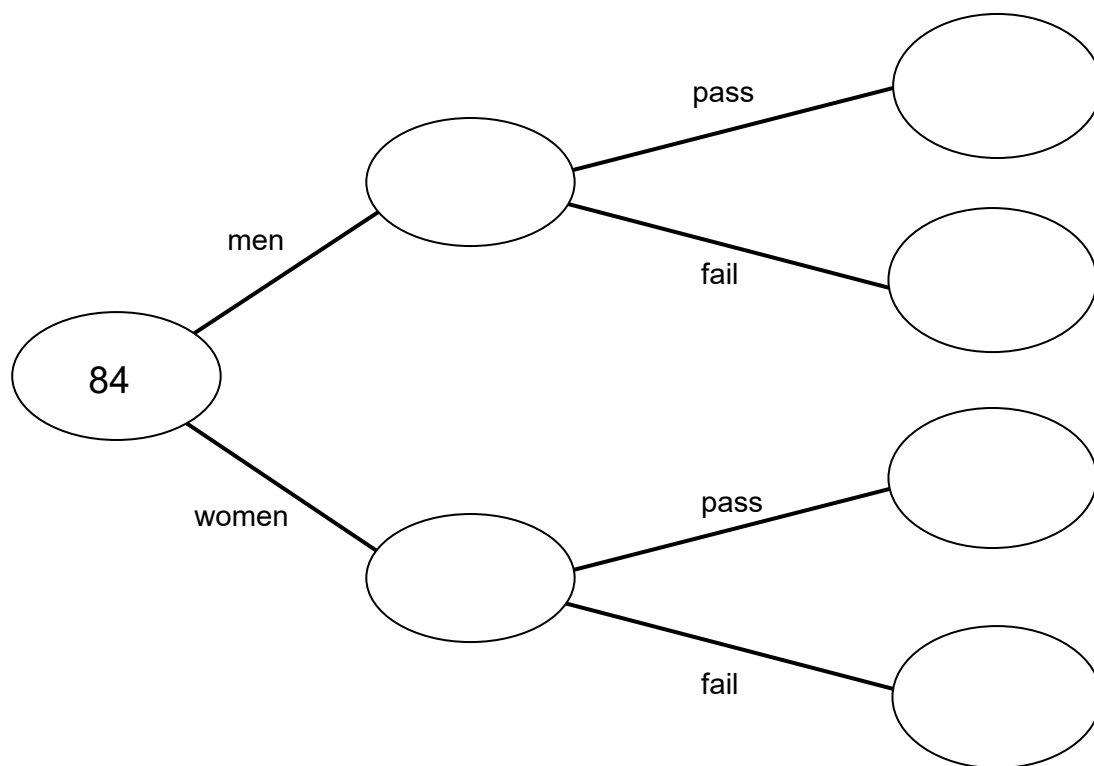
[3 marks]

Answer _____

- 2 84 people take a driving test.
A quarter are men.
For the men, the ratio pass : fail = 5 : 2
The number of women who pass is double the number of women who fail.

2 (a) Complete the frequency tree.

[3 marks]



2 (b) One of the people is chosen at random

Work out the probability that it is a woman who passes.
Give your answer as a fraction in its simplest form.

[2 marks]

Answer _____

- 3 A pond had 60 fish.
27 were carp and the rest were tench.
10 fish were added.

The probability that a fish picked at random is a carp is now $\frac{1}{2}$

How many **tench** were added?

[3 marks]

Answer _____

- 4 A box contains counters that are red, blue, yellow or green.
The table shows some information about picking a counter at random.

	red	blue	yellow	green
Probability		0.25	0.35	0.3

There are 40 blue counters.

How many red counters are there?

[4 marks]

Answer _____

5 120 students have Maths or Science next lesson.

There are 12 more boys than girls altogether.

The ratio Maths : Science = 2 : 3

Half as many girls have Maths as have Science.

5 (a) Complete the table.

[4 marks]

	Boys	Girls	Total
Maths			
Science			
Total			120

5 (b) A student is chosen at random.

Work out the probability that it is a boy who has Maths.

[1 mark]

Answer _____