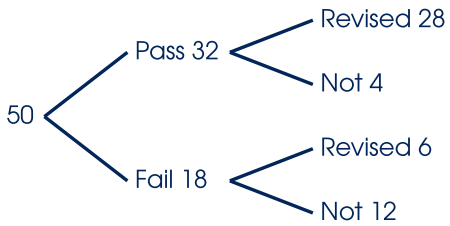
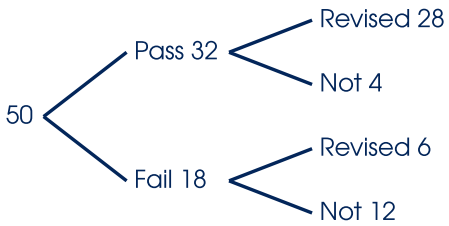
GCSE HIGHER · REVISION MAT 3

Frequency trees

1 How many students who passed revised?



2 How many students revised?



3 Explain why the first branches of a frequency tree must add up to the total.

4 90 people: 50 drink coffee.

35 coffee drinkers also eat breakfast.

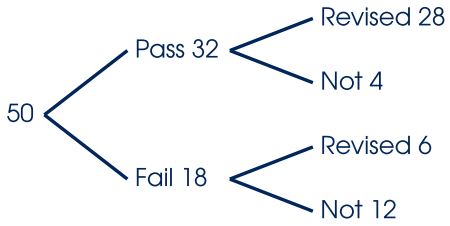
60 people eat breakfast altogether.

How many drink neither?

5 A student is chosen at random.

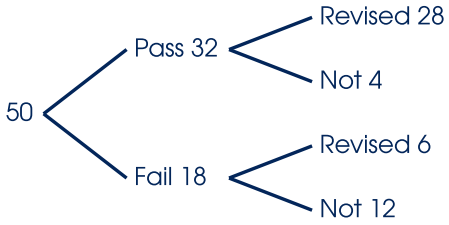
Show that

P(failed and did not revise) = $\frac{6}{25}$.

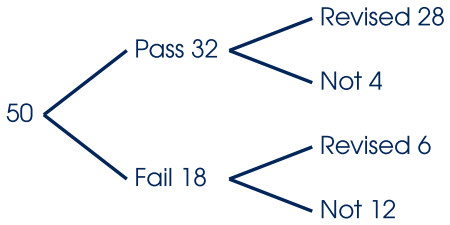


6 A student who revised is chosen.

Find P(passed).



7 Compare the pass rates for students who revised and did not.



8 240 cars were tested;

$\frac{5}{8}$ passed first time.

Of the rest, 70% passed on retest.

How many cars failed both tests?

Mr&Mrs MATHS

ANSWERS · REVISION MAT 3

Frequency trees

1 28

2 34

3 **Every person is in exactly one of the first groups.**

4 No coffee: 40; of those, breakfast 25

15

5 $\frac{12}{50} = \frac{6}{25}$

6 $\frac{28}{34} = \frac{14}{17}$

7 Revised: $\frac{28}{34} \approx 82\%$

Not: $\frac{4}{16} = 25\%$

Revising is linked to passing.

8 Failed first: 90

27

Mr&Mrs MATHS