GCSE FOUNDATION · REVISION MAT 1

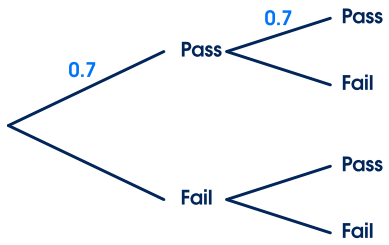
Combined events

1 The probability that it rains on Saturday is 0.3. The probability that it rains on Sunday is 0.4. The events are independent.

Work out the probability that both happen.

2 The same event happens twice. Each time P(Pass) = 0.7.

Complete the probability tree diagram.



3 Explain why flipping a coin and rolling a dice are independent events.

4 A bag has 3 red and 2 blue counters. A counter is taken, then put back. A second counter is taken.

Show that P(both red) = $\frac{9}{25}$.

5 P(Amy passes) = 0.6. P(Ben passes) = 0.7. The events are independent.

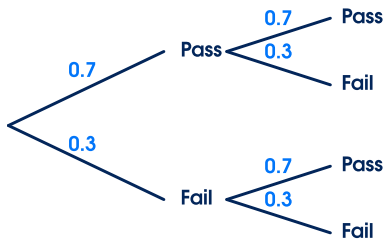
Work out the probability that exactly one of them passes.

6 A bag has 5 red and 3 blue sweets. Kim takes a sweet and eats it. She then takes another.

Work out the probability that both sweets are red.

1 $0.3 \times 0.4 = \mathbf{0.12}$

2



3 The result of flipping a coin does not affect the result of rolling a dice.

ANSWERS · REVISION MAT 1

Combined events

4 $\frac{3}{5} \times \frac{3}{5} = \mathbf{\frac{9}{25}}$ ✓

5 Amy only: $0.6 \times 0.3 = 0.18$
Ben only: $0.4 \times 0.7 = 0.28$

Total = **0.46**

6 $\frac{5}{8} \times \frac{4}{7} = \frac{20}{56}$

$= \mathbf{\frac{5}{14}}$

Mr&Mrs MATHS