GCSE FOUNDATION · REVISION MAT 2

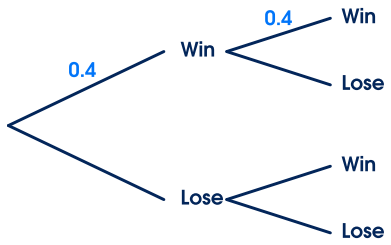
Combined events

1 The probability that Ali's bus is late is 0.2. The probability that Ali's train is late is 0.15. The events are independent.

Work out the probability that both happen.

2 The same event happens twice. Each time P(Win) = 0.4.

Complete the probability tree diagram.



3 Explain why spinning a spinner and flipping a coin are independent events.

4 A bag has 4 red and 1 blue counters. A counter is taken, then put back. A second counter is taken.

Show that P(both red) = $\frac{16}{25}$.

5 P(Amy passes) = 0.3. P(Ben passes) = 0.5. The events are independent.

Work out the probability that exactly one of them passes.

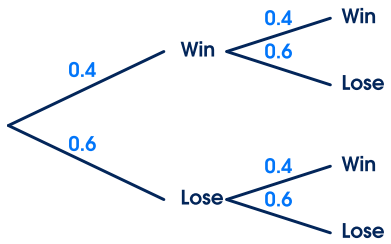
6 A bag has 4 red and 2 blue sweets. Kim takes a sweet and eats it. She then takes another.

Work out the probability that both sweets are red.

Mr&Mrs MATHS

1 $0.2 \times 0.15 = \mathbf{0.03}$

2



3 The result of spinning a spinner does not affect the result of flipping a coin.

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Combined events

4 $\frac{4}{5} \times \frac{4}{5} = \frac{16}{25}$ ✓

5 Amy only: $0.3 \times 0.5 = 0.15$

Ben only: $0.7 \times 0.5 = 0.35$

Total = **0.5**

6 $\frac{4}{6} \times \frac{3}{5} = \frac{12}{30}$

$= \frac{2}{5}$

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