GCSE FOUNDATION · REVISION MAT 3

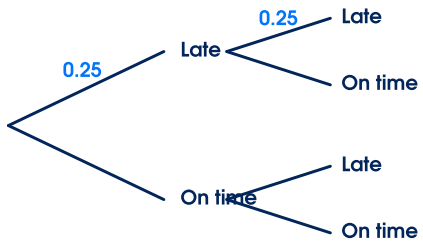
Combined events

1 The probability that a seed grows is 0.8.
The probability that a second seed grows is 0.8.
The events are independent.

Work out the probability that both happen.

2 The same event happens twice. Each time P(Late) = 0.25.

Complete the probability tree diagram.



3 Explain why rolling a red dice and rolling a blue dice are independent events.

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

Show that P(both red) = $\frac{4}{25}$.

5 P(Amy passes) = 0.8. P(Ben passes) = 0.4. The events are independent.

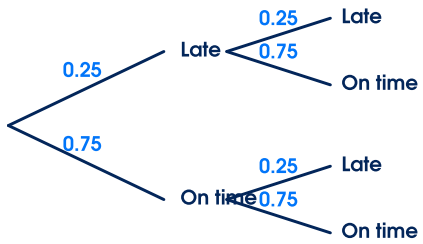
Work out the probability that exactly one of them passes.

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

Work out the probability that both sweets are red.

1 $0.8 \times 0.8 = \mathbf{0.64}$

2



3 The result of rolling a red dice does not affect the result of rolling a blue dice.

ANSWERS · REVISION MAT 3

Combined events

4 $\frac{2}{5} \times \frac{2}{5} = \mathbf{\frac{4}{25}}$ ✓

5 Amy only: $0.8 \times 0.6 = 0.48$
Ben only: $0.2 \times 0.4 = 0.08$

Total = **0.56**

6 $\frac{6}{10} \times \frac{5}{9} = \frac{30}{90}$

$= \mathbf{\frac{1}{3}}$

Mr&Mrs MATHS