

Solutions

Each answer shows the steps, then the **result**.

2.1

- knowing that one has occurred does not change the probability of the other

2.2

- $P(A \cap B) = 0.5 \times 0.4 = 0.2$

2.3

- $P(A \cup B) = P(A) + P(B) - P(A \cap B)$

3.1 B

3.2 B

3.3

(a)

- $0.6 + 0.3 - 0.2 = 0.7$

(b)

- no — $P(A) \cdot P(B) = 0.18 \neq 0.2$