Complementary events

6 questions | 12 marks

Equivalent correct methods earn the corresponding marks.

1. Find P(not 1) for a fair standard die. [2 marks]

Five of six equally likely outcomes are not 1.

Answer: 5/6.

2. If P(rain)=0.35, find P(no rain). [2 marks]

1−0.35=0.65.

Answer: 0.65.

3. A bag has 4 red,3 blue,5 green tokens. Find P(not green) for a random draw. [2 marks]

There are 12 tokens and 7 are not green.

Answer: 7/12.

4. An event has probability 72%. Find the complement probability. [2 marks]

100%−72%=28%.

Answer: 28%.

5. Why are even and odd outcomes complements on a standard die? [3 marks]

Every die outcome belongs to exactly one of the two sets.

Answer: They do not overlap and together cover all six outcomes.

6. Find the complement probability of an impossible event. [1 mark]

1−0=1.

Answer: 1.