

Unit 13_Probability_Practice 1.1

Focus points

- Identify complementary events
- Calculating probability based on complementary events.

Need to remember

- 1/ The sum of probabilities of all possible outcomes is 1.
- 2/ The sum of probabilities of 2 complementary events is 1.

Part 1: Choose the correct answers

Question 1: How many possible outcomes when a football team play a match?

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|--------------------------|----------------------------|
| A. 2 (win or lose) | C. 2 (win or draw) |
| B. 3 (win, lose or draw) | D. many possible outcomes. |

Question 2: The probability that a football team win a match is 0.3. Which of the following is the complementary event of win a match.

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|------------|---------|---------|
| A. not win | B. draw | C. lose |
|------------|---------|---------|

Question 3: The probability of a football team win a match is 0.3. What is the probability of the complementary event of win a match.

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|--------|--------|
| A. 0.3 | C. 0.7 |
| B. 0.6 | D. 0.4 |

Question 4: How many possible outcomes when you roll a fair (or unbiased) dice?

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|------|------|
| A. 6 | C. 4 |
| B. 5 | D. 3 |

Question 5: The probability of throwing number 3 when you throw a fair or unbiased dice?

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|------------------|------------------|
| A. $\frac{1}{6}$ | C. 1 |
| B. $\frac{5}{6}$ | D. $\frac{3}{4}$ |

Question 6: Which of the following is the complementary event of throwing number 3 when you throw a dice?

- A. not throwing a 3
- B. throwing a 1,2,4,5, or 6
- C. both of the above is correct
- D. both of the above is not correct

Question 7: A dice is biased. The probability of throwing 3 is $\frac{1}{4}$ and the probability of throwing 6 is $\frac{1}{8}$. What is the probability of not throwing 3?

- A. $\frac{3}{4}$
- B. $\frac{7}{8}$
- C. $\frac{5}{6}$
- D. $\frac{2}{3}$

Question 8: A dice is biased. The probability of throwing 3 is $\frac{1}{4}$ and the probability of throwing 6 is $\frac{1}{8}$. What is the probability of throwing less than 6?

- A. $\frac{3}{4}$
- B. $\frac{7}{8}$
- C. $\frac{5}{6}$
- D. $\frac{2}{3}$

Question 9: The probability that Tom will cycle to school is $\frac{1}{2}$. The probability that he will take the bus is $\frac{1}{3}$. What is the probability that he will neither cycle or take the bus?

- A. $\frac{1}{2}$
- B. $\frac{2}{3}$
- C. $\frac{5}{6}$
- D. $\frac{1}{6}$

Question 10: A spinner has sectors in different colors. The probability it is red is 0.3. What is the probability that it is not red?

- A. 0.4
- B. 0.3
- C. 0.7
- D. 0.6

Part 2: State whether the following are complementary events.

Statements	True	False
a/ Getting an even number and getting an odd number when rolling a dice		
b/ Getting a prime number, getting an even number when rolling a dice		
c/ All student attend class, no student attend class		
d/ It will rain tomorrow, it will be sunny tomorrow		
e/ I will pass the exam, I will fail the exam.		
f/ The football team will win the match, the football team will lose a match		
g/ Tom goes to school on time, Tom go to school late		