

## 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?

**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.

**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.

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

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

A.  $1/6$       C.  $1$   
B.  $5/6$       D.  $3/4$

**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  $1/4$  and the probability of throwing 6 is  $1/8$ . What is the probability of not throwing 3?

- A.  $3/4$
- B.  $7/8$
- C.  $5/6$
- D.  $2/3$

**Question 8:** A dice is biased. The probability of throwing 3 is  $1/4$  and the probability of throwing 6 is  $1/8$ . What is the probability of throwing less than 6?

- A.  $3/4$
- B.  $7/8$
- C.  $5/6$
- D.  $2/3$

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

- A.  $1/2$
- B.  $2/3$
- C.  $5/6$
- D.  $1/6$

**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		