PROBABILITY QUIZ

1. Which of the following is an experiment?
   a) Tossing a coin.
   b) Rolling a single 6-sided die.
   c) Choosing a marble from a jar.
   d) All of the above.

2. Which of the following is an outcome?
   a) Throwing a pair of dice.
   b) Landing on red.
   c) Choosing 2 marbles from a jar.
   d) None of the above.

3. Which of the following experiments does NOT have equally likely outcomes?
   a) Choosing a number at random from 1 to 7.
   b) Flipping a coin.
   c) Choosing a letter at random from the word SCHOOL.
   d) None of the above.

4. What is the sample space for choosing a prime number less than 15 at random?
   a) {2; 3; 5; 7; 11; 13; 15}  b) {2; 3; 5; 7; 11; 13}  c) {2; 3; 5; 7; 9; 11; 13}  d) All of them.

5. What is the sample space for choosing one letter at random from the word DIVIDE?
   a) {d; i; v; i; d; e}  b) {1; 2; 3; 4; 5; 6}  c) {d; i; v; e}  d) None of them.

6. A spinner has 7 equal sectors numbered 1 to 7. If you spin the spinner, then which of the following is certain?
   a) Landing on a number less than 7.
   b) Landing on a number less than 8.
   c) Landing on a number greater than 1.
   d) None of the above.

7. What is the probability of choosing 14 hearts (without replacement) from a standard deck of 52 playing cards?
   a) 14/52  b) 1  c) 0  d) None of them.

8. If a single 6-sided die is rolled, then which of the following events is neither certain nor impossible?
   a) Rolling a number less than 7.
   b) Rolling an even number.
   c) Rolling a zero.
   d) None of the above.

9. We draw one card from a deck of 32 cards. Let A, B, C and D, be the following events:
   A: Draw an ace;  B: Draw a heart;  C: Draw the ace of hearts;  D: Draw a spade.
   - Which of these two events are mutually exclusive?
     a) A and B.  b) A and C.  c) A and D.  d) B and D.
   - Which of the following event is the complement of C?
     a) Don’t draw a heart.  b) Draw either an ace or a heart.  c) Don’t draw an ace.
     d) Neither of them.