CHAPTER-6 | Perimeter and Area

QUIZ PART-20

1. Shape A has area 18 sq units and Shape B has area 20 sq units. Which shape has bigger area?
   A. Shape A
   B. Shape B
   C. Both equal
   D. Cannot say (B)

Explanation : 20 square units is greater than 18 square units.

2. In Question 5, Shape A has a longer:
   A. area
   B. side
   C. perimeter
   D. diagonal (C)

Explanation: The chapter states that Shape A has a longer perimeter than Shape B.

3. If a rectangle is 12 units × 8 units, its area is:
   A. 20 sq units
   B. 48 sq units
   C. 96 sq units
   D. 108 sq units (C)

Explanation: Area = 12 × 8 = 96 square units.

4. Half of the area of a 12 × 8 rectangle is:
   A. 24 sq units
   B. 36 sq units
   C. 48 sq units
   D. 56 sq units (C)

Explanation: Half of 96 square units is 48 square units.

5. When the inner rectangle occupies exactly half the area of the 12 × 8 rectangle, its area is:
   A. 48 sq units
   B. 50 sq units
   C. 96 sq units
   D. 24 sq units (A)

Explanation : The outer rectangle has area 96 square units, so half is 48 square units.

6. A square folded in half and cut along the fold gives:
   A. two triangles B. two circles
   C. two rectangles D. one rectangle (C)

Explanation : The chapter says the square is cut into two rectangles along the fold.

7. After cutting a square into two equal rectangles, the total area of both rectangles is:
   A. less than the area of the square
   B. equal to the area of the square
   C. double the area of the square
   D. triple the area of the square (B)

Explanation : Cutting does not change total area, so both rectangles together have the same area as the square.

8. The area of each rectangle formed from the square is:
   A. half the area of the square
   B. equal to the area of the square
   C. double the area of the square
   D. three times the area of the square (A)

Explanation : The square is divided into two equal rectangles, so each gets half the area.

9. If the side of a square is s, the sum of the perimeters of the two rectangles formed is:
   A. 4s B. 5s
   C. 6s D. 8s (C)

Explanation : Each rectangle is $s * \frac{s}{2}$, so each perimeter is 3s. Two rectangles together give 6s.

10. The sum of the perimeters of the two rectangles is what fraction of the perimeter of the square?
    A. 1/2 B. 1
    C. 3/2 D. 2 (C)

Explanation : The square perimeter is 4s4s4s, while both rectangles together have perimeter 6s. So the fraction is 6s/4s=3/2=1½