

CHAPTER-7 | Area

QUIZ
PART-27

1. To estimate the area of an irregular shape, the chapter suggests using:

- A. A protractor
- B. A square grid
- C. A compass
- D. A divider (B)

Explanation : A square grid helps estimate the area by counting complete and partial squares.

2. While estimating an irregular area on a grid, complete squares are:

- A. Ignored
- B. Counted fully
- C. Counted as half
- D. Counted twice (B)

Explanation: Each complete square contributes one full square unit to the total area.

3. Partial squares are generally:

- A. Ignored completely
- B. Counted approximately
- C. Counted twice
- D. Treated as complete squares (B)

Explanation: Partial squares are estimated to obtain a close approximation of the area.

4. If an irregular figure covers 20 complete squares and about 8 half-squares, its estimated area is:

- A. 20 square units
- B. 24 square units
- C. 28 square units
- D. 36 square units (B)

Explanation: Eight half-squares equal four complete squares. Therefore, the estimated area is $20 + 4 = 24$ square units.

5. The main purpose of using a square grid is to:

- A. Measure angles
- B. Estimate the area of irregular shapes
- C. Measure volume
- D. Find the perimeter only (B)

Explanation : Square grids provide an easy way to estimate areas that cannot be measured using simple formulas.

6. The estimated area becomes more accurate when:

- A. Larger grid squares are used
- B. Smaller grid squares are used
- C. The grid is removed
- D. Only complete squares are counted (B)

Explanation : Smaller grid squares reduce estimation errors and improve accuracy.

7. Area estimated using a grid is expressed in:

- A. Linear units
- B. Square units
- C. Cubic units
- D. Degrees (B)

Explanation : Area measures surface coverage and is always expressed in square units.

8. Which of the following is the best method to estimate the area of a leaf?

- A. Measuring only its length
- B. Measuring only its width
- C. Placing it on a square grid
- D. Measuring its perimeter (C)

Explanation : A square grid provides a practical way to estimate the area of irregular objects like leaves.

9. Which statement is correct about area estimation?

- A. It always gives the exact area.
- B. It gives an approximate value close to the actual area.
- C. It cannot be used for irregular figures.
- D. It depends only on the perimeter. (B)

Explanation : Grid estimation provides an approximate area, which is usually very close to the actual value.

10. The activities in Part 27 mainly help students:

- A. Solve algebraic equations
- B. Estimate the area of irregular regions using square grids
- C. Find the volume of solids
- D. Construct circles (B)

Explanation : This section develops practical skills for estimating the area of irregular shapes using square grids.