Area A. Choose the Correct Answer: 1. What is the area of a rectangle with length 8 cm and breadth 6 cm? a) 14 cm² b) 48 cm² c) 28 cm² d) 24 cm² 2. Area is measured in: b) cm² a) cm c) cm³ d) meters 3. If the side of a square is 9 cm, its area is: a) 81 cm² b) 18 cm² c) 36 cm² d) 72 cm² 4. A square has an area of 64 cm². What is the length of its side? a) 6 cm b) 7 cm c) 8 cm d) 9 cm 5. Which of the following shapes will cover the largest area if all sides are equal? a) Triangle b) Rectangle c) Square d) Circle **B.** Write the Missing Terms to Complete the Sentences: 1. The area of a square is given by the formula × . 2. The area of a rectangle is equal to its _____ multiplied by its _____. 3. Area tells us how much ______ a surface occupies. 4. The unit of area is written in units. 5. If the area of a square is 49 cm², its side is cm.

C. Figure out the answers to these questions:

- 1. A rectangular carpet is 12 m long and 5 m wide. Find its area.
- 2. A square field has a side of 15 m. How much area does it cover?
- 3. A whiteboard is 90 cm long and 60 cm wide. Find the total writing area.
- 4. Draw two rectangles with the same area but different lengths and breadths.
- 5. The area of a rectangle is 96 m^2 and the length is 12 m. Find the breadth.

- 6. A tile is square-shaped with a side of 25 cm. How much space will 4 such tiles cover?
- 7. Compare the areas of a square with side 10 cm and a rectangle with length 12 cm and breadth 8 cm.

D. Mark each sentence with a True (\checkmark) or False (X):

- 1. Area is the measurement of the boundary of a shape.
- 2. A square and a rectangle can have the same area.
- 3. Area is measured using linear units.
- 4. The area of a square with side 10 cm is 100 cm².
- 5. Area does not change when we rotate a shape.

E. Challenge yourself with these questions:

1. Match the following:

- i. Area of square a) cm²
- ii Area of rectangle b) length × breadth
- iii. Unit of area c) side × side
- 2. If a room is 5 m wide and 7 m long, how many square meters of carpet are needed to cover the floor?
- 3. A garden is 20 m long and 10 m wide. How much grass is needed to cover it completely?
- 4. Find two different rectangles with an area of 48 cm² and write their length and breadth.
- 5. Find the area of a rectangle whose length is double the breadth and area is 72 $\,m^2.$
- 6. The area of a square field is 121 m². What is the cost of fencing it at ₹25 per metre?

F. Find the area of shaded regions in the following figures.

