

DELHI PUBLIC SCHOOL, JAMMU

SESSION 2024-25

Assignment-6

Class: VI

Subject: Mathematics

Topic: Perimeter & Area

Read the instructions carefully and answer the following questions. Assertion and Reason Based Questions This type of reasoning questions consists of two statements; an assertion (statement of fact) and a reason (explanation for the assertion). You have to determine whether each statement is correct. If both the statements are correct, you have to determine whether the reason supports the assertion. There will be four answer choices for the possible outcomes and you have to select the correct one.

Q1. Assertion (A): Area of a rectangle = length + breadth

Reason (R): The amount of surface enclosed by a closed figure is called it's area

- a) Both A and R are true and R is the correct explanation of A.
- b) Both A and R are true but R is not the correct explanation of A.
- c) A is true but R is false.
- d) A is false but R is true.

Q2. Assertion (A) : The length of rectangle of area 135 sq cm and breadth 9cm is 15cm.

Reason (R) : Length of the rectangle= Area x Breadth

- a) Both A and R are true and R is the correct explanation of A.
- b) Both A and R are true but R is not the correct explanation of A.
- c) A is true but R is false.
- d) A is false but R is true.

Q3. Assertion (A): Side of the square whose area is 225 sq. m is 15m.

Reason (R): The standard unit of area is sq. units

- a) Both A and R are true and R is the correct explanation of A.
- b) Both A and R are true but R is not the correct explanation of A.
- c) A is true but R is false.
- d) A is false but R is true.

Q4. The length of a rectangular field is 82 m . If it's perimeter is 248m, what is it's breadth ?

Q5. What will happen to the area of a square if its side is (i) halved (ii) doubled?

Q6. A rectangle is 80 cm long and 20 cm broad . Find the side of a square whose area is equal to that of the rectangle.

Q7. Two squares each of side 19 cm are placed side by side without any gap. Find

(i) Perimeter (ii) area of the rectangle so formed.

Q8.Case Study: The Garden

Ravi has a rectangular garden with the following dimensions:

Length: 30 meters & Breadth: 20 meters

He wants to:

- 1.Build a fence around the garden.**
- 2.Cover the garden with grass.**
- 3.Divide the garden into 5 equal sections for different flowers.**

Q1. What is the perimeter of Ravi's garden?

- a) 50 meters**
- b) 100 meters**
- c) 60 meters**
- d) 120 meters**

Q2. If the cost of fencing is ₹10 per meter, what will be the total cost of fencing the garden?

- a) ₹1,000**
- b) ₹1,200**
- c) ₹600**
- d) ₹2,000**

Q3. If the cost of grass is ₹5 per square meter, what will be the total cost to cover the garden with grass?

- a) ₹3,000**
 - b) ₹5,000**
 - c) ₹2,000**
 - d) ₹6,000**
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