

DELHI PUBLIC SCHOOL, JAMMU

SESSION 2024-25

Assignment-5

Class: VII

Subject: Mathematics

Topic: Perimeter &Area, Visualising solid shapes

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): Circumference of a circle of radius r is $2\pi r$.

Reason (R): 1760 is the circumference of circle whose radius is 2.8m

- 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 perimeter of a square is 48 cm. Its area is 144 cm sq.

Reason (R) : Area= $12 \times 12 = 144$ cm sq.

- 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): The Side view of a cone appears as triangle.

Reason (R): A cone is a three dimensional geometric shapes that tapers smoothly from a flat base.

- 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 base of an isosceles triangle is 48 cm and its perimeter is 98 cm Find its area?

Q5. The base and height of a triangle are in the ratio 4:5.If it's area is 250 meter sq ,find it's base and the height.

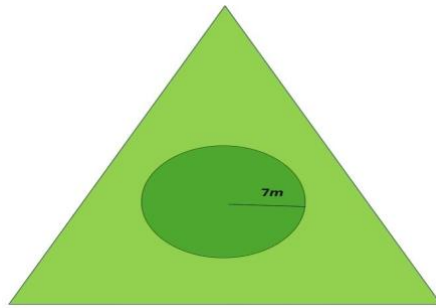
Q6. Draw the sketch of two figures that has no edge.

Q7. Three cubes of side 3 cm each are joined to each other in a row

(a) What shape will you get? (b) Write it's dimensions.

(c) Draw top and side view of the shape formed.

Q8. Case Study : Fencing a Triangular Park with a Circular Flower Bed



A triangular park has sides of 24 m, 30 m, and 36 m. Inside the park, there is a circular flower bed with a radius of 7 m.

1. Find the area of the circular flower bed.

(a) 152 sq.m. (b) 154sq.m (c) 150sq.m. (d) none of these

2. What is the remaining area of the park excluding the flower bed?

(a) 123.45 sq.m. (b) 203.15 sq.m (c) 230 sq.m. (d) none of these

3. If fencing costs ₹100 per meter, calculate the total fencing cost for the triangular park.

(a) ₹1900 (b) ₹9500 (c) ₹9000 (d) none of these