ST. JOSEPH'S SR. SEC. SCHOOL

Sector-44-D, Chandigarh

Subject-Mathematics

Class – VII (2021-22)

Home Assignment-11

Chapter-11(Perimeter and Area)

Dear Students

Area and Perimeter are very important terms while dealing with mathematics. This applies to any shape of the field- irregular or regular.

For example, If we want to fence a plot then how would we calculate how much fencing is required?

Again, if we want to put a new carpet in our room, how much carpet we need to buy?

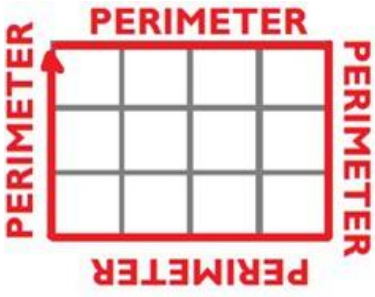
In such cases, we need to calculate the area or the perimeter of the plot or room.

In this chapter we will learn about how to find area and perimeter of plane figures.

Area- It is the part of plane or region occupied by a closed figure.

PERIMETER : The word perimeter is used either to indicate path or length. The word comes from two Greek words **'Peri'**(which means around) and **'Meter'**(which means measure). Perimeter is the total length of the boundary of a closed figure.

The perimeter of a simple closed figure is the sum of the measure of line segments, binding the figure.



RECTANGLE-

**Perimeter of a rectangle= 2(Length+ Breadth)

Breadth

Length

Area of a Rectangle= Length X Breadth

SQUARE:

a

a

Square

a

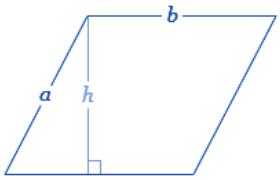
a

**Perimeter of a Square= 4a

**Area= a^2

Where, a= length of side

** Parallelogram:

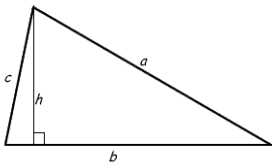


Area= Base x Height

Perimeter = 2 (a+b)

Where, a and b are the lengths of parallel sides.

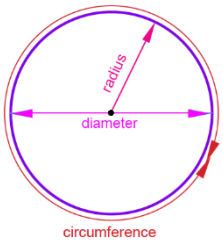
Triangle-



Area of a triangle = ½ x Base x Height

Perimeter = Sum of all sides

** **Circle-**



Area of a circle= πr^2

Circumference- $2\pi r$ or πd (where d= diameter)

Where π= 22/7 or 3.14 and r= Radius

(if not stated π is taken as 22/7)

** Perimeter of Regular Polygons= Length of side x Number of sides

e.g Perimeter of regular pentagon= 5a (a= length of side)

Area-Perimeter Song

- Perimeter we can measure
- Add up all the sides
- Area is the treasure
- Everything Inside

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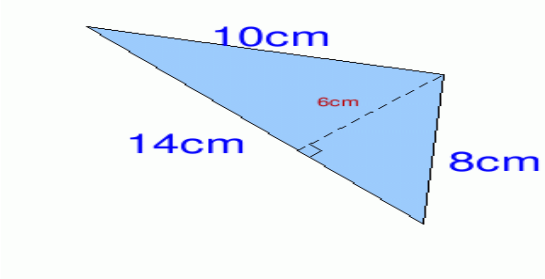
Child Centric Worksheet-11

Chapter-11 (Perimeter and Area)

1. **Fill in the blanks:-**
   a) If a wire in the shape of a square is rebent into a rectangle, then the _____ of both the shapes remain same, but _____ may vary.
   b) To find area, any side of a parallelogram can be chosen as _____ of the parallelogram.
   c) Circumference of a circle can be found by multiplying diameter with _____.
   d) 1 hectare= _____m^2 and 1m^2= _____cm^2

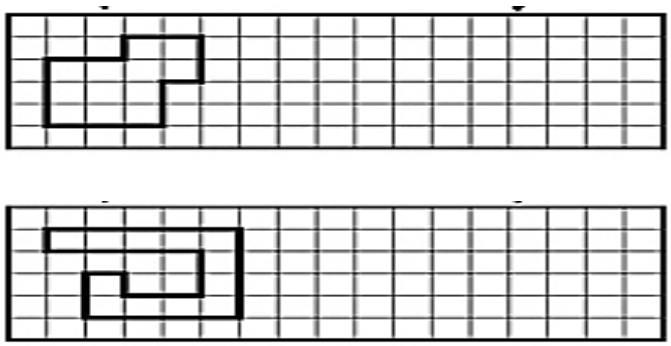
2. The length of one side of a square is 12 cm. find the area and perimeter.
3. Find the area of the rectangle if its perimeter is 48 cm and its breadth is 6 mm.
4. Find the area of given triangle



5. How much distance (in meters) will be covered by a wheel of radius 25 cm if it rotates 350 times?
6. The base of a parallelogram is thrice its height. If the area is 192 cm^2, find the base and height.

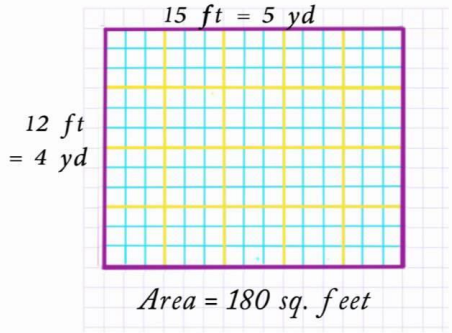
Critical and Creative Thinking

7. Creative Corner: Find the Area and Perimeter of the given shapes.(Assume that each small square has an area equal to 1cm^2)



8.HIT THE FLOOR

A bedroom floor is 12 ft by 15 ft.
Find the area of the floor in square feet.



How many square yards can cover the floor?