Uncovered Module System (UMS)

Chapter Name – Perimeter & Area

Class- 7th

Remember & Understanding Based Questions

Ques.1) If the side of a parallelogram are increased to four times of its original lengths, then by how much percent the perimeter of the parallelogram will increase?
a) 200 % b) 400 % c) 500 % d) 300 %

Ques.2) Which one among the following statements is not true?
a) All the triangles equal in area are not congruent.
b) The area of a parallelogram PQRS is PQ× RQ c) Area of a circle is $\frac{\pi d^2}{4}$ where d is the diameter of the circle.
d) All the congruent triangles have equal area.

Ques.3) Diagonal of a parallelogram are 6 cm and 8 cm, respectively and one side is 5 cm. The area of parallelogram is:
a) 24 sq. cm b) 40 sq. cm c) 30 sq. cm d) 48 sq. cm

Ques.4) If each side of a rhombus is doubled, how much will its area increase?
a) 3 times b) 4 times c) 2 times d) 1.5 times

Ques.5) If the base of a triangle is 18 cm and distance between base and opposite vertex is 10 cm, what will be the area of triangle?
a) 20 cm^2 b) 90 cm^2 c) 10 cm^2 d) 206 cm^2

Ques.6) If the lengths of the sides of a triangle are 5 m, 1.2 decametre and 130 dm, then its area is _____.
a) 30 m^2 b) 40 m^2 c) 24 m^2 d) 48 m^2

Ques.7) A wire is bent to form a square of a side 22 cm. If the wire is rebent to form a circle, its radius is
a) 22 cm b) 14 cm c) 11 cm d) 7 cm

Ques.8) The diameter of a circle is
a) 2π b) $2\pi r$ c) r^2 d) 2r

Ques.9) The diameter of a wheel is 40 cm. How many revolutions will it make an covering 176 m?
a) 340 b) 140 c) 300 d) 240

Ques.10) The _____ is the distance around a given two - dimensional object.
a) Perimeter b) Volume c) Area d) Side

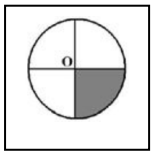
Ques.11) The area of a circle is:
a) πr^2 b) $2\pi r^2$ c) πr d) $2\pi r$

Ques.12) The area of a semicircle of radius 4r is
a) $4\pi r^2$ b) $8\pi r^2$ c) $2\pi r^2$ d) $12\pi r^2$

Ques.13) If the area of two circles are in the ratio 25 : 36, then the ratio of their circumference is _____.
a) 5 : 6 b) 4 : 3 c) 3 : 4 d) 6 : 5

Ques.14) A string with which a goat is tied. It has been increased from 12 m to 23 m. Now how many more grass - fed areas, she can graze?
a) 1210 m^2 b) 1225 m^2 c) 1250m^2 d) 1200 m^2

Ques.15) If the area of a circle is 44 cm^2 , the area of the shaded portion will be



a) 11 cm^2 b) 44 cm^2 c) 22 cm^2 d) 33 cm^2

Ques.16) The diameter of a circle is 28 cm. Find its area

Ques.17) Find the missing value:Base is 15cm, Height is _____ and Area of the triangleis 87 cm^2.

Ques.18) Find the circumference of the circle with the radius (Take$\pi = \frac{22}{7}$): 28 mm

Ques.19) Fill in the blanks

1. A parallelogram in which the adjacent sides are equal is called a _____.
2. The perimeter and area of a rhombus can be calculated using the same formulaas that for a _____.
3. Perpendicular dropped on the base of a parallelogram from the opposite vertex is known as the corresponding _____ of the base.
4. A Parallelogram is a flat shape with opposite sides are _____ and _____ in length.
5. Triangles having the same base have equal area.
6. Area of a triangle $=\frac{1}{2}$ base $\times$ _____.
7. The area of a triangle is the space enclosed by its _____ sides
8. The perpendicular drawn on one side from the opposite vertex is known as the height or _____.
9. The fixed point is called the…… of the circle.

Ques.20) State True & False.

1. A Rhombus is not a parallelogram.
2. The measure of the region enclosed by the figure is called its area.
3. A parallelogram can also be a trapezoid.
4. All parallelograms having equal areas have the same perimeters.
5. A parallelogram has no right angles unless it is also a rectangle.
6. A parallelogram is a quadrilateral, whose each pair of opposite sides are parallel.
7. A parallelogram can also be a square.
8. The distance around a circular region is known as its area.
9. All congruent triangles are equal in area.
10. A line segment joining any two points on a circle is called a radius of the circle.
11. The ratio of the circumference of a circle to its radius is always 2π : 1.
12. The diameter is the longest chord.
13. The distance covered to walk along a plane closed figure (boundary) is called its perimeter.

Analytical Based Questions

Ques.1) Assertion (A): The area of a parallelogram is 64 m^2 . If it's base is 16m, then the length of the corresponding altitude is 2m.

Reason (R): The area of a parallelogram is a product of the base and their corresponding altitude.

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.

Ques.2) Assertion (A): The legs of a right - angled triangle are 10cm and 24 cm respectively. The area of the triangle is 240 sq. cm.

Reason (R): Area of triangle $=\frac{1}{2}$ area of a parallelogram.

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.

Ques.3) Assertion (A): The area of a triangle is 36 sq. m. If its base is 8 m, the length of the corresponding altitude is 4.5 m.

Reason (R): Area of triangle = $\frac{1}{2} \times$ base $\times$ height.

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.

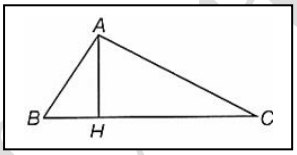
Ques.4) Assertion (A): The circumference of a circle is 22 cm. Its Radius is 3.5 cm.
Reason (R): Circumference is the length of the total boundary.
a) Both A and R are true and R is the correct explanation of A.
b) Both A and R are true but R is not the correct explanation of A.
c) A is true but R is false. d) A is false but R is true.

Ques.5) Assertion (A): The radius of the wheel of a car is 35 cm. This distance covered by the wheel in 200 rotations is 44m.
Reason (R): Perimeter is the distance around a closed figure.
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.

Ques.6) Assertion (A): The area of a circle is 55.44 sq. cm. Radius of a circle is 4cm.
Reason (R): The area of a circle is πr^2.
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.

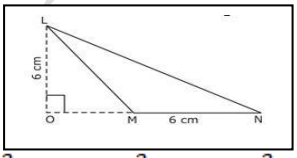
Ques.7) Assertion (A): The radii of two circles are in the ratio 2 : 3. The ratio of their areas is 4 : 9.
Reason (R): Area of Circle = πr^2.
a) Both A and R are true and R is the correct explanation of A.
b) Both A and R are true but R is not the correct explanation of A.
c) A is true but R is false. d) A is false but R is true.

Ques.8) ABC is a right angled triangle with $\angle BAC = 90^o$. AH is drawn perpendicular to BC. If AB = 60 cm and AC = 80 cm, then BH = _____.



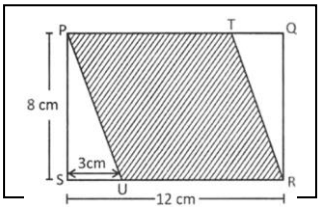
a) 36 cm b) 32 cm c) 30 cm d) 24 cm

Ques.9) Find the area of the triangle:



a) 18 cm^2 b) 14 cm^2 c) 12cm^2 d) 16 cm^2

Ques.10) In the shown figure, PQRS is a rectangle and PTRU is a parallelogram shaped shaded region. Find the ratio of shaded region to unshaded region.

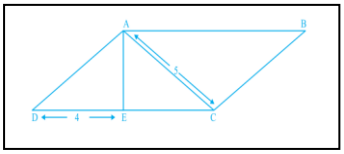


a) 2 : 1 b) 1 : 2 c) 1 : 3 d) 3 : 1

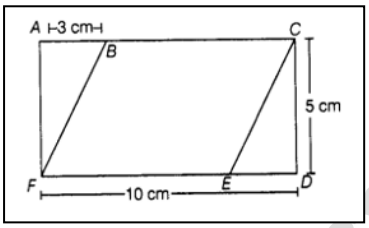
Ques.11) The area of a parallelogram is 288 cm^2 and its height is 16 cm. Find the length of the corresponding base.

a) 20 cm b) 24 cm c) 22 cm d) 18 cm

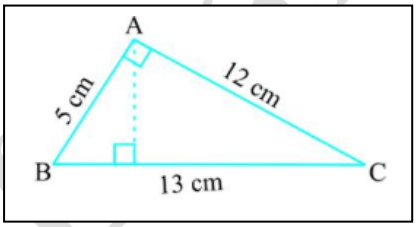
Ques.12) ABCD is a parallelogram in which AE is perpendicular to CD (as shown in the figure). Also AC = 5 cm, DE = 4 cm, and the area of△ AED = 6 cm^2 . Find the perimeter and area of ABCD.



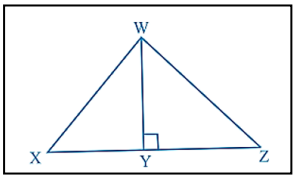
Ques.13) In the given figure, find an area of parallelogram BCEF, where ACDF is the rectangle.



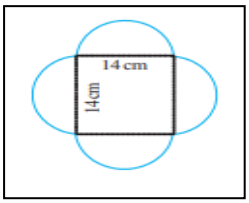
Ques.14) △ ABC is right angled at A. AD is perpendicular BC. If AB = 5 cm, BC = 13 cm and AC = 12 cm. Find the area of △ ABC. Also, Find the length of AD.



Ques.15) Ratio of the area of△ WXY to the area of △ WZY is 3 : 4 (as shown in figure). If the area of △ WXZ is 56 cm^2 and WY = 8 cm, find the lengths of XY and YZ.



Ques.16) Find the perimeter of the given shape (Fig)(Take $\pi = \frac{22}{7}$)



Question No. 17 to 20 are based on the given text. Read the text carefully and answer the questions:

The area of a parallelogram is given by = **length**$\times$ **breadth = l** $\times$ **b**

Any side of a parallelogram can be chosen as **base** of the parallelogram. The perpendicular dropped on that side from the opposite vertex is known as **height** (altitude). In the parallelogram ABCD, DE is perpendicular to AB. Here AB is the base and DE is the height of the parallelogram.

In parallelogram ABCD, BF is the perpendicular to opposite side AD. Here AD is the base and BF is the height.

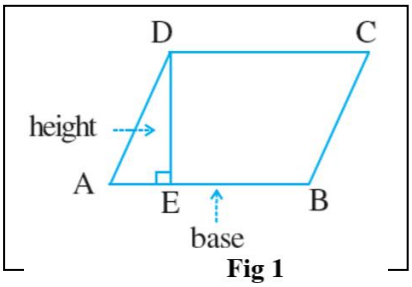


Fig 1

Ques.17) In fig, if AB = 5 cm and DE = 4 cm then what is the area of parallelogram ABCD?
a) 10 cm^2 b) 20 cm^2 c) 15 cm^2 d) 25 cm^2

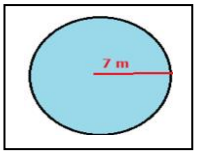
Ques.18) In fig., if AB = 6 cm and AD = 4 cm then what is the perimeter of parallelogram ABCD?
a) 10 cm b) 25 cm c) 20 cm d) 15 cm

Ques.19) In fig., if the area of parallelogram ABCD is 30 cm^2 and AD = 6 cm, What is height BF?
a) 5 cm b) 6 cm c) 15 cm d) 10 cm

Ques.20) If in any parallelogram the base = 10 cm and height = 5 cm then its area = _____ cm^2

Question No. 21 to 24 are based on the given text. Read the text carefully and answer the questions:
Once a farmer dug a circular flower bed in his field. Now he has to purchase fertilizer for this bed. But the question raised that how much fertilizer to be purchased.

For this he took help from his son Varun. Varun measured the radius of the bed it was found to be 7 m. He used formula to calculate the area of the flower bed.



Later Varun found from his father that 1 kg of fertilizer is required for 1 m^2 area, Also the cost of 1 kg fertilizer was ₹ 50.

Ques.21) What is the area of the flower bed?

a) 154 m^2 b) 22 m^2 c) 77 cm^2 d) 44 cm^2

Ques.22) How much fertilizers did the Farmer bought?

a) 77 kgs b) 77 kg c) 154 kgs d) 44 kgs

Ques.23) What was cost of the fertilizers?

a) ₹ 770 b) ₹ 154 c) ₹ 1540 Wd) ₹ 7700

Ques.24) If the radius of flower bed were 14 cm then its area would be _____ m^2 .