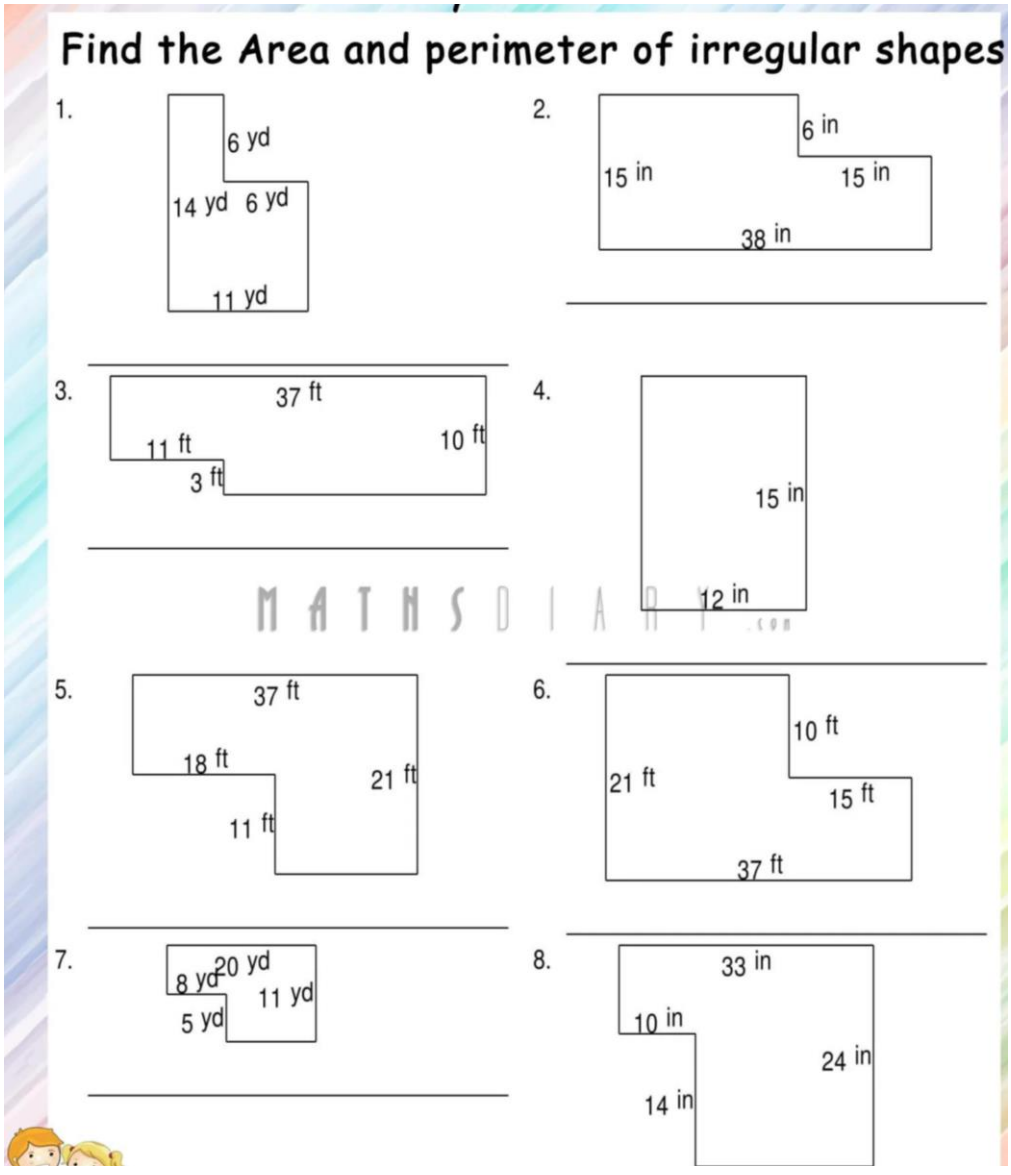
KENDRIYA VIDYALAYA RTC ITBP ILLUPPAIKUDI

WINTER BREAK HOLIDAY HOMEWORK 2024-25

MATHS

I.Learn MULTIPLICATION TABLE (2 - 20 table)

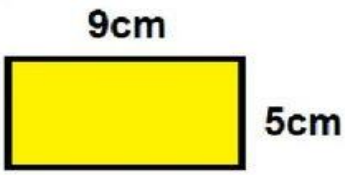
II.



III.

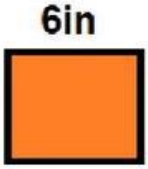
Area and Perimeter Worksheet

Calculate the area and perimeter of the following figures.



Perimeter _____cm

Area _____cm²

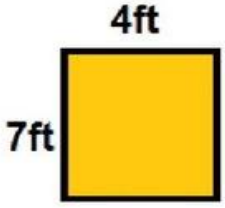


Perimeter_____in

Area_____ in²

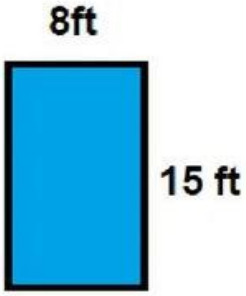
Perimeter _____cm

Area _____cm²



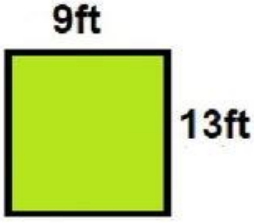
Perimeter _____ft

Area _____ft²



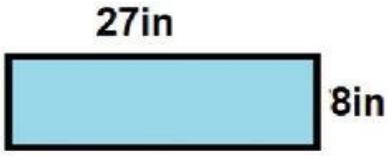
Perimeter _____ft

Area_____ ft²



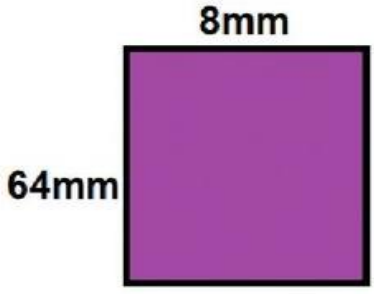
Perimeter _____ft

Area _____ft²



Perimeter _____in

Area_____in²



Perimeter _____mm

Area _____mm²

KENDRIYA VIDYALAYA RTC ITBP ILLUPPAIKUDI

WINTER BREAK HOLIDAY HOMEWORK

CLASS:VII

I.ANSWER THE FOLLOWING COMPETENCIES BASED QUESTIONS

1.Mohan is the head (mukhiya) of his village and also a social worker. In his village there is no school building so he plans to construct a school in his village. The length and breadth of the school plot are in the ratio 10:3. The perimeter of the school plot is 260m. He also gives a square plot for playground near the school. The area of square plot is same as the length of the school plot.

(a) Form a linear equation for the perimeter of school plot

(a) 13x = 260 (b) 100x = 260 (c) 26x = 260 (d) 20x = 260

_____

(b) Find the length of school plot (a) 10m (b) 20m (c) 30m (d) 100m

_____

(c) Find area of rectangular plot (a) 100m2 (b) 300m2 (c) 3000m2_____

2.Mr. Sohan Kumar is a very hard-working farmer. He owns a circular land of diameter 42m in which he grows vegetables but many times some cows and goats of the village destroy his vegetable garden. So, he decides to put a barbed fence all around his farmland.

1. What will be length of wire if he installs only one round of fencing wire.

_____

2. Find the length of fencing wire needed if he makes 3 rounds of fence 3. Find the cost of the fencing wire if 1m of it cost ₹ 15. _____

3.In a test of mathematics for class 7, the teacher Wrote the following statements on the blackboard for which the students were required to give algebraic expression. What expression will you give for. A) 10 times X subtracted from 5. _____

B) one half of the sum of xand y. _____

c) 2 times the product of X and Y subtracted from 3 times the sum of x and y.

_____

4.In our earth 36141900 square Km of area is covered with water and 148647000 square Km of area is covered with land. Find a) Area of water in standard form? _____

B) Area of land in standard form?_____

C) Which has greater area?_____

II.CHOOSE THE CORRECT ANSWER.

1. A polynomial with one term is called (a) Monomial (b) Binomial (c) Trinomial
2. What is the coefficient of x in the expression 7x + 4y -3z (a) 7 (b) 4 (c) -3
3. Which of the following terms is an unlike term (a) 3x (b) 2x2
4. Which of the following is not a monomial

(a) 3x (b) 12x (c) 3x + 4 (d) None of the above

5.Which of the following rational numbers is negative?

(a) – (−3 /7) (b) −5/ – 8 (c) 9/ 8 (d) −3 /7

6. Find the odd one out of the following and give reason.

(a) 4 /3 ×3/ 4 (b) −3 /2 ×−2/ 3 (c) 2 ×1 /2 (d) −1/ 3 ×3/ 1

III.LEARN MULTIPLICATION TABLE (2 -20 th table)

KENDRIYA VIDYALAYA RTC ITBP ILLUPPAIKUDI

WINTER BREAK HOLIDAY HOMEWORK 2024-25

MATHS

I.ANSWER THE FOLLOWING CASE STUDY BASED QUESTIONS.

1) A box contains a cylinder and a cube . The height and radius of cylinder are 7cm and 14cm respectively. It has been observed that side of cube is half of the radius of cylinder. Based on the above information answer the following questions a)Find the side of the cube b)Find the curved surface area of cylinder? c) which has greater volume cube or cylinder? Why?

2) A company packages its milk powder in cylindrical containers whose base has a diameter of 16.8 cm and height 20.5 cm. company places a label 1.5cm from the top and the bottom around the curve surfaces of the containers as shown On the basis of the above information anser the following questions a) Find the radius of the base of the container b) Find the height of the label c) Find the area of the label.

3)A child was reading about cells of which living things are made of , while reading he finds the size of red blood cell to be 0.000007m that of a plant cell size of 0.0000129m. Based on above situation answer the following questions a) Express the size of both cells in standard form b) Can we see the cells by naked eyes?

4)In a stack there are 5 books each of thickness 20mm and 5 paper sheets each of thickness 0.016 mm. a) What is the thickness of 5 books in cm?

b) What is the thickness of 5 paper sheets in mm?

c) What is the total thickness of the stack.

5)The students of Anju‘s class sold posters to raise money. Anju wanted to create a ratio for finding the amount of money her class would make for different numbers of posters sold. She knew they could raise Rs 250 for every 60 posters sold. (a) How much money would Anju‘s class make for selling 102 posters? (b) Could Anju‘s class raise exactly Rs 2,000? If so, how many posters would they need to sell? If not, why? (c) suppose her classmates sell 40 posters for Rs. 400, how much money would they make for selling 25 posters?

6)Riddhi wants to make a garden in her house in the shape of a parallelogram ABCD, the area of which is $4x^2-9$ and side BC is of length 3m. (i) If the height corresponding to side AB is $2x+3$, then find the length of side CD. (ii) she fenced the garden with wire which cost a total of rupees x. Find the rate of wire per unit length. (iii) find the area of parallelogram shaped garden for $x=4$ units.

KENDRIYA VIDYALAYA RTC ITBP ILLUPPAIKUDI

WINTER BREAK HOLIDAY HOMEWORK 2024-25

MATHS

CLASS:IX

I. ANSWER THE FOLLOWING COMPETENCIES BASED QUESTIONS.

1.Three girls Reshma, Salama and Mandeep are playing a game by standing on a circle of radius 5 metre. Reshma throws a ball to Salma, Salma to Mandeep and Mandeep to Reshma. The distance between Resham to Mandeep is 6 metre and Reshma to salma is 8 metre. If O is the centre of the circle then answer the following questions

i) Diameter of the circle: (a) 6 m (b) 8 m © 10 m (d) 12 m

ii)Measure of MRS: (a) 180° (b) 90° (c) 100° (d) 80°

iii)Area of Triangle RMS: (a)10 m2 (b)20 m2 (c)24 m2 (d) 40 m2

iv) Length of longest chord of a circle : (a)6 m (b) 8 m (c) 10 m (d) 12 m

v) What is the distance between Mandeep and Salma? (a) 6 m (b) 8 m (c) 10 m (d) 12 m

2. Director of DAV public school planned to fix a signal board, indicating SCHOOL AHEAD across main road. It is an equilateral triangular shaped with side 24 cm. Principal of the school calls the monitor Brajesh of class IX and asked the following questions: Q.1 What is the perimeter of board? (a) 72 cm (b) 82 cm (c) 90 cm (d) 100 cm Q.2 Find area using Heron's formula. (a) 150√3 cm2 (b) 160√3 cm2 (c) 170√3 cm2 (d) 144√3cm2

Q.3 Sum of all sides is called---- (a) Volume (b) Area (c) Perimeter (d) None of these

3.Gaurav has umbrella which is made by stitching 10 triangular pieces of cloth of two different designs, each piece measuring 20 cm,50 cm and 50 cm.
Q.1 Perimeter of triangle is (a) 120 cm (b) 150 cm (c) 180 cm (d) 200 cm

Q.2 Semi perimeter of triangle is ----- (a) 50 cm (b) 60 cm (c) 40 cm (d) 30 cm

Q.3 Area of triangular piece in cm2 is ---- (a) 100√6 cm2 (b) 500√6 cm2 (c) 200√6cm2 (d) 600√6 cm2

Q.4 Area of 5 triangular piece in cm2 is ---- (a) $500\sqrt{6}$ cm2 (b) $1000\sqrt{2}$ cm2 (c) $1000\sqrt{6}$cm2 (d) $290\sqrt{6}$ cm2

4.Today is Shalu's birthday. Her parents went to the market and bought a cake and 12 birthday caps. All caps are like a cone. Shalu's mother gave a cap to each child. All of Shalu's friends enjoyed a lot there. After dinner, Shalu's father called all her friends and asked them some questions.

(a) If the diameter of a cone is 14 cm and its slant height is 9 cm. The radius of cone is- (i) 28 cm (ii) 14 cm (iii) 7 cm (iv) 23 cm

(b) If the diameter of a cone is 14 cm and its slant height is 9 cm. The curved surface area of cone is- (i) 126 cm2 (ii) 178 cm2 (iii) 188 cm2 (iv) 198 cm2

(c) If the radius of a cone is 8 cm and its slant height is 10cm. The height of cone is-

(i) 6 cm (ii) 7 cm (iii) 8 cm (iv)None of these

II.RECAPITULATION

Revise the chapters (October month- December month)