

CHAPTER -1

KNOWING OUR NUMBERS

Worksheet

Q1. The diameter of Jupiter is 142800000 meters. Insert commas suitably and write the diameter according to Indian and International system.

Q2. Radius of the earth is 6400 km and that of mars is 43, 00,000. Whose radius is bigger and by how much?

Q3. The population of Tripura and Meghalaya were 3,199,203 and 2,318,822 respectively. Write the Population Of these states in words.

Q4. As per census of 2001, the populations of four states are given below. Arrange the states in ascending order of their population.

STATE	POPULATION
Maharashtra	96878627
Andhra Pradesh	76210007
Bihar	82998509
U.P	166197921

Q5. Estimate the sum of 7826 and 12469 rounded off to nearest hundred.

Q6. Find estimated value of, according to general rule:

a) $13275 - 6725$

b) 965×325

Q7. Solve and write answer in Roman numeral

a) $LXVI + XXIX$

B) $CDXLIX - XCV$

Q8. Find the product of Place value and Face value of **8** in 3260**8**135.

Q9. A vessel has 3l 200ml of fruit juice. How many glasses each of capacity 60 ml can be filled?

Q10. A leading tempo can carry 482 boxes of biscuits weighing 15kg each, whereas a van can carry 518 boxes each of same weight. Find the total weight that can be carried by both the vehicles.

Q11. In a factory 165 bottles are manufactured in a day. How many bottles will be manufactured in a year, if there are 55 non working days.

Q12. A multi-storey apartment has four storey. Each storey has 12 rooms. One room requires 9 l 225 ml Paint. Find total quantity of paint required for this apartment.

CHAPTER 2
WHOLE NUMBERS

WORKSHEET

Q1. Write the Successor and predecessor of the following:

- a) 9998 b) 5999 c) 10001 d) 700000

Q2. Which is the greatest negative integer?

Q3. How many numbers are there between 99 and 142?

Q4. Solve using suitable arrangements:

- a) $949 - 629 + 80$ b) $172 + 87 + 28$

Q5. Find the value, using properties:

- a) 79×101 c) 139×97
b) $313 \times 87 + 313 \times 12 + 313$ d) $125 \times 8 \times 17 - 500 \times 2 \times 7$

Q6. Find product, by suitable rearrangement:

- a) $865 \times 50 \times 2$ b) $8 \times 713 \times 125$

Q7. In a hostel, the rent of room is Rs.500 per day and lunch per day is Rs.100. If a student stays in hostels for 30 days, find the amount paid by him to the college canteen.

Q8. Find the product of the greatest three digit number and greatest two digit number, using property.

Q9. A principal of a school places orders for 95 chairs and 27 tables with a dealer each chair costs Rs.170 and each table costs Rs.135. Find the total amount he has to pay to the dealer.

Q10. In a garden trees are planted in 104 rows. If there are 526 trees in each row, how many trees are there in all in the garden?

Q11. Each employee of a workshop is paid Rs.5860 per month. Find total salary paid by the workshop Manager to 97 workers.

Q12. A quire of papers contains 144 sheets. If Mohammad Ali purchased 13 quires in January, 15 quires in February and 12 quires in March. Find total number of sheets purchased by him in three months.

CHAPTER 3
PLAYING WITH NUMBERS

WORKSHEET

Q1. Draw factor tree of 128.

Q2. Write five pairs of prime numbers whose sum is divisible by 4.

Q3. Using each of the digits 1, 2, 3 and 4 only once, determine the smallest 4-digit number divisible by 4.

Q4. Test the divisibility of following numbers by 11

a) 5335

b) 9020814

Q5. Using divisibility tests, determine which of the following numbers are divisible by 4 and 9?

a) 4096

b) 21084

Q6. Replace * by the smallest digit (using divisibility test):

a) $65*1$ to make it divisible by 9.

b) $68*27$ to make it divisible by 11.

Q7. A milkman has 36L of milk. Find out the different vessels in which it can be filled exact number of times.

Q8. A company digs 10 poles after 3kms. If first pole is dug at your school gate, find out the distance of all other poles from your school?

Q9. Fatima wants to mail three parcels to three village schools. She finds that the postal charges are Rs.20, Rs.28 and Rs.36 respectively. If she wants to buy stamps only of one denomination, what is the greatest denomination of stamps she must buy to mail three parcels?

Q10. Three brands A, B, and C of biscuits are available in packets of 12, 15 and 21 biscuits respectively. If shopkeeper wants to buy stamps an equal number of biscuits, of each brand, what is the minimum number of packets of each brand, he should buy?

Q11. The number of students in three sections A, B and C of class VI in school are 30, 35 and 40. Find the minimum number of books required for the class library for equal distribution in section A, B and C.

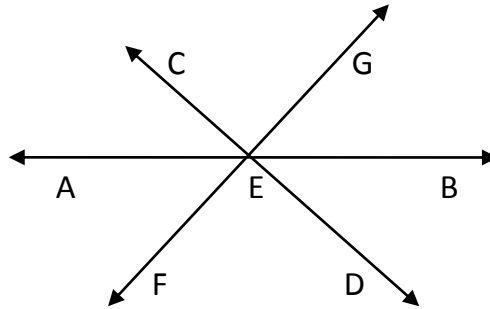
Q12. There are three heaps of wheat weighing 510 kg, 408 kg and 1054 kg. Find the maximum capacity of a bag so that the wheat of each heap can be packed in exact number of bags.

CHAPTER-4
BASIC GEOMETRICAL IDEAS

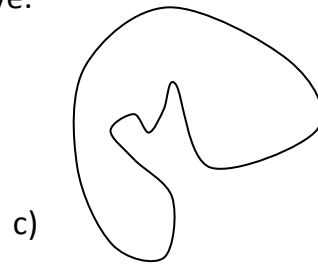
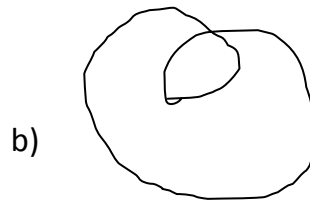
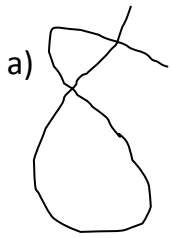
WORKSHEET

Q1. From the figure, answer the following:

- a. Any five points.
- b. A line.
- c. 6 rays.
- d. Intersecting lines.

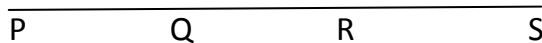


Q2. Classify following figures as open, closed and simple curve:



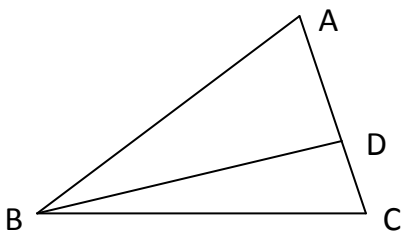
Q3. Draw a circle of radius 3.5 cm. Also, find its diameter.

Q4. Name the number of line segments in the following figure:



Q5. How many angles, vertices and sides are there in a triangle?

Q6. Name the angles in the given figure:

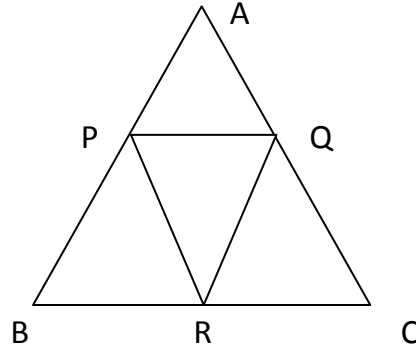


Q7. Draw a rough figure:

- A line \overleftrightarrow{AB} intersected by line \overleftrightarrow{PQ} at Z.
- A quadrilateral ABCD and state two adjacent and two opposite angles.

Q8. In the diagram, identify:

- All triangles
- At least 6 angles
- At least 6 line segments



Q9. Draw a circle and mark:

- Its longest chord.
- a sector
- a segment

CHAPTER – 5

UNDERSTANDING ELEMENTARY SHAPES

WORKSHEET

Q1 Classify the triangles:

- a) $A = 120^\circ$, $B = 30^\circ$, $C = 30^\circ$
- b) $PQ = QR = 4.5\text{cm}$, $RS = 3\text{cm}$
- c) $X = 90^\circ$, $Y = 50^\circ$, $Z = 40^\circ$

Q2. Where will the hour hand stop if it starts

- a) From 3 and turn through 1 right angle.
- b) From 11 and turn through 3 right angle.

Q3. How many degrees are there in

- a) $\frac{2}{5}$ of a straight angle
- b) $2\frac{1}{2}$ of right angle

Q4. Find the measure of the angle formed by hands of clock at

- a) 8 a.m
- b) 10 p.m

Q5. How many right angles do you make if you start facing

- a) South and turn clockwise to west?
- b) North and turn anti-clockwise to east?

Q6. Which direction will you face if you start facing west and make $\frac{3}{4}$ of a revolution anti-clockwise

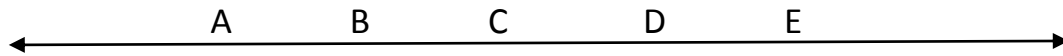
Q7. Name an angle:

- a) More than $\frac{1}{2}$ of a revolution.
- b) Less than $\frac{1}{4}$ of a revolution.

Q8. Can you construct a triangle using 9 matchsticks? If yes, tell the type of triangle.

Q9. Points A, B, C, D, E are collinear such that $AB = BC = CD = DE$. Then

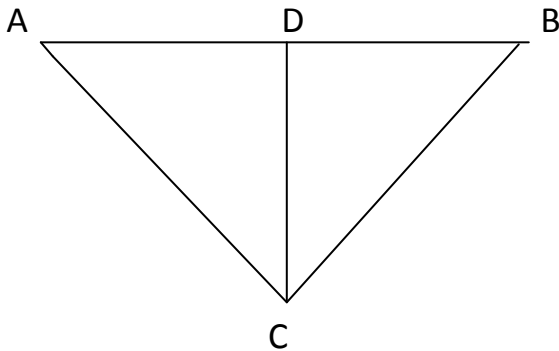
- a) $AD = AB + \underline{\hspace{1cm}}$ b) $AD = AC + \underline{\hspace{1cm}}$ c) mid-point of AE is $\underline{\hspace{1cm}}$
 d) mid-point of CE is $\underline{\hspace{1cm}}$ e) $AE = \underline{\hspace{1cm}} \times AB$



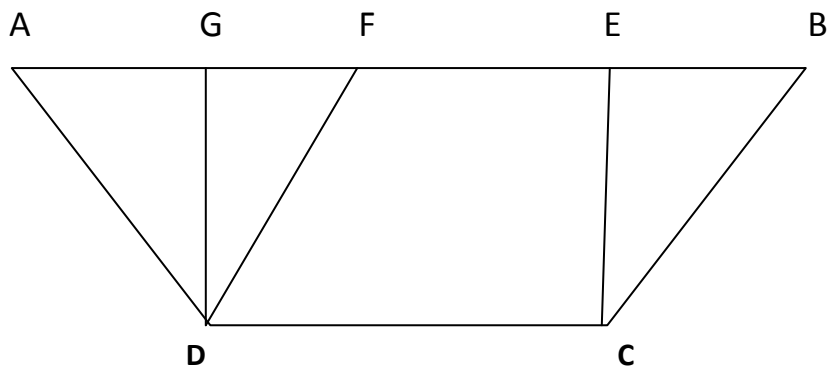
Q10. Fill the table:

Name of shapes	Faces	Edges	vertex
Cube			
Sphere			
Cylinder			
Cone			

Q11. On the basis of your observation, identify the acute angle, right angle, Obtuse angle and straight angle.



Q12 Name a rectangle, a parallelogram and a trapezium in following figure:



CHAPTER 6

INTEGERS

WORKSHEET

Q1. Write the opposite of each of the following:

- a) Winning by a margin of 2000 votes.
- b) Depositing Rs.100 in the bank account.
- c) 20° C rise in temperature.

Q2. If we denote the height of a place above sea level by a positive integer and depth below the sea level by a negative integer, write the following using integers with appropriate signs:

- a) 200 m above sea level
- b) 100 m below sea level
- c) sea level

Q3. Write two integers whose sum is less than both the integers.

Q4. Arrange the following integers in ascending order and find the sum also.

-2, 1, 0, -3, +4, -5, -3, 0, -1, -4, -3, -6

Q5. If we are at 8 on the number line, in which direction should we move to reach the integer

- a) -5
- b) 11
- c) 0

Q6. Using number line, write the integer which is

- a) 4 more than -5
- b) 3 less than 2
- c) 2 less than -2

Q7. Find the value of

$$49 - (-40) - (-3) + 69$$

Q8. Subtract -5308 from the sum of $[(-2100) + (-2001)]$

Q9. Temperature of a place at 12:00 noon was $+5^{\circ}$ C. Temperature increased by 3° C in first hour and decreased by 1° C in the second hour. What was the temperature at 2:00 pm?

Q10. The sum of two integers is 30. If one of the integers is -42, then find other.

Q11. Subtract the sum of -4128 and 2112 from the sum of 1638 and -116.

Q12. What should be added to -351 to obtain -53?

CHAPTER 7
FRACTIONS

WORKSHEET

Q1. The food we eat remains in the stomach for a maximum of 4 hours. For what fraction of a day, does it remain there?

Q2. Find the equivalent fraction of $\frac{24}{30}$ with: (a) numerator 4 (b) denominator 10

Q3. Grip size of a tennis racquet is $11\frac{9}{80}$ cm. Express the size as an improper fraction.

Q4. Arrange the given fractions in ascending and descending order: $\frac{6}{7}, \frac{7}{8}, \frac{4}{5}, \frac{3}{4}$

Q5. Mr. Sharma has 24 apples. He uses $\frac{1}{6}$ of them. Find:

a) How many apples left with him?

b) How many apples he used?

Q6. Mukesh has a box contains marbles 13 to 26. He gave some marbles to Sona having prime numbers on them and some marbles to Rahul having even numbers on them. Find fraction of marbles, left with Mukesh.

Q7 Dev has 10 balls, Out of 4 are red. Rahul has 50 balls. How many red balls should Rahul have to become equivalent fraction to Dev?

Q8 Ram works $\frac{3}{4}$ hours, Shyam works $\frac{4}{5}$ hours, Rohan works for $\frac{5}{4}$ hours. Who works for longest time? Who came first?

Q9 What should be added to $1\frac{1}{3}$ to get $2\frac{4}{5}$?

Q10 In room A, Out of 45 students, 15 are girls. In room B, Out of 30 students, 10 are girls. In which room fraction of girls is more?

Q11 A man spends $\frac{2}{3}$ of his salary on ration, $\frac{1}{5}$ of it on clothes and $\frac{1}{10}$ of it on rent. What part of his salary does he spend and save?

Q12 A milkman had $10\frac{3}{4}$ L milk. He sold $3\frac{1}{2}$ L milk in morning and $4\frac{1}{3}$ L milk at evening. How much milk left with him?

CHAPTER 8

DECIMALS

WORKSHEET

Q1. The length of Harsh's book is 8 cm 4 mm. What will be the length in cm?

Q2. Express as decimals:

a) 5809g to kg

b) 2009 paise to rupees

c) 2 cm 87mm as cm

Q3. Arrange in ascending order:

20.02, 0.2, 1.001, 0.110, 0.10, 20

Q4. Draw Place Value Chart and represents 13.761 and also write expanded form of it.

Q5. Simplify: $5.28 - 1.4 + 3.116$.

Q6. Represent the following decimals on a number line:

$\frac{19}{10}$, $2\frac{3}{10}$, $\frac{2}{5}$

Q7. Subtract the sum of 2.75 and 13.8 from 25.

Q8. The sum of two numbers is 100. If one of them is 78.01, find the other.

Q9. Alok purchased 1 kg 200g potatoes, 250g ginger, 5 kg 30g onion, 500g palak and 2 kg 60g tomatoes. Find the total weight of vegetables purchased by him?

Q10. Victor drives 87.050km on Saturday and 89km on Sunday. On which day, he drives more and by how much?

Q11. Suman purchased 5 kg 75g of fruits and 3kg 465g of vegetables, and put them in a bag. If this bag with these contents weighs 9 kg. Find the weight of the empty bag.

Q12. Rashid spent Rs. 35.75 for maths book and Rs.32.60 for science book. If he had Rs.100, find the balance amount left with him.

Q13. Rahim , Ravinder and Rohit bought 8.5 litres, 7.25 litres and 9.4 litres milk respectively from a milk booth. How much milk did they buy in all? If there was 30 litres of milk in booth, find the quantity of milk left.

CHAPTER – 9

DATA HANDLING

WORKSHEET

Q1. The result of a science test is as follows:

70, 80, 90, 80, 80, 60, 80, 70, 90, 65, 100, 60, 70, 60, 70, 85, 65, 70, 70, 85, 90, 60, 65, 80, 60.

Make a frequency table for the above data and answer the following questions:

- (a) What is the maximum marks obtained?
- (b) How many students scored less than 75 marks?
- (c) How many students scored 80 marks or above?
- (d) How many students appeared in the test?

Q2. During the rainy season, students of a class made a count of the umbrellas which students brought to the class on Monday, Tuesday, Wednesday, Thursday and Friday. The count was as under:

Monday (15), Tuesday (25), Wednesday(20), Thursday(10) and Friday(5). Represent this data in the form of a pictograph.

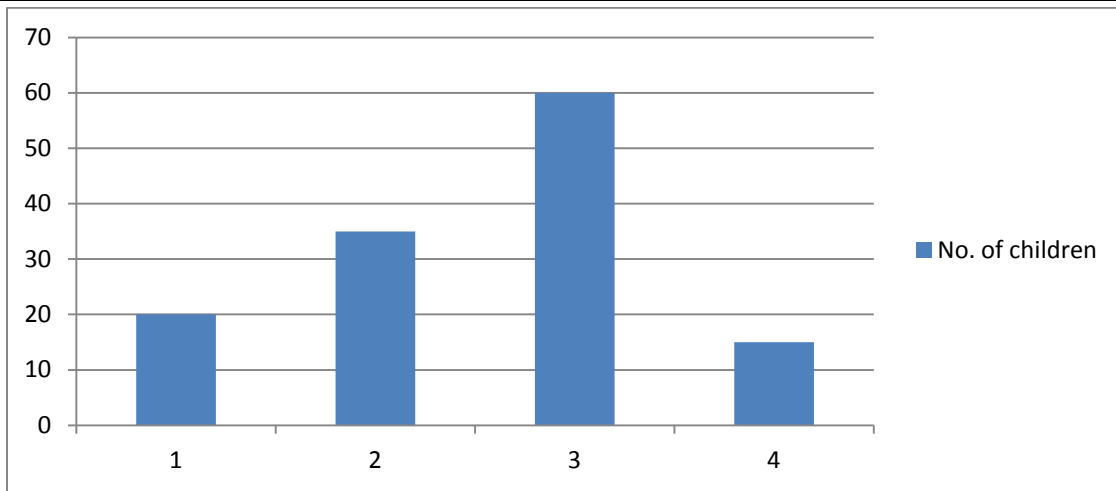
Q3. Following are the number of members in 20 families in a village:

5,9,4,8,8,7,6,7,6,6,6,2,8,5,7,5,8,9,7,6

Make a frequency table for the above data and answer the following questions:

- (a) What is the smallest family size?
- (b) How many families are of the smallest size?
- (c) What is the biggest family size?
- (d) How many families are of the biggest size?
- (e) What is the most common family size?

Q4. In a survey of 130 families of a colony, the number of children in each family was recorded and the data has been represented by the bar graph given below:



Read the bar graph and answer the following questions:

1. What information does the bar graph give?
2. How many families have 2 children?
3. How many families have no child?
4. What percentage of families have 4 children?

Q5. The lengths in km (rounded to nearest hundred) of some major rivers of India is given below

Rivers	Narmada	Mahanadi	Brahmaputra	Ganga	Kaveri	Krishna
Length (in km)	1300	900	2900	2500	800	1300

Draw a bar graph to represent the above information.

Q6. The pictograph given below shows how many letters were collected from a postbox on each of the days of a certain week:

(1 = 10 letters)

Monday	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Tuesday	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Wednesday	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Thursday	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Friday	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Saturday	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

From the pictograph, answer the following questions:

- a) On which day the minimum number of letters were collected?
- b) What was the total number of letters collected from the postbox over the whole week?
- c) How many more letters were collected on Friday than Wednesday?
- d) How many less letters were collected on Wednesday than on Tuesday?

Q7. Thirty students were interviewed to find out what they want to be in future. Their responses are listed as follows:-

Doctor,Engineer,Doctor,Pilot,Officer,Doctor,Engineer,Doctor,Pilot,officer,Pilot,Engineer,officer,pilot,Doctor,Engineer,Pilot,officer,Doctor,officer,Doctor,Pilot,Engineer,Doctor,Pilot,Officer,Doctor,Pilot, Doctor,Engineer.

Arrange the data in a table using tally marks.

Q8. Observe the following pictograph and answer the following questions:

1 = 10 articles

Material used	Articles
WOOD	<input type="checkbox"/> <input type="checkbox"/>
GLASS	<input type="checkbox"/>
METAL	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
RUBBER	<input type="checkbox"/>
PLASTIC	<input type="checkbox"/> <input type="checkbox"/>

Observe the pictograph and answer the following questions:

- Which material is used in maximum number of articles?
- Which material is used in minimum number of articles?
- Which material is used in exactly half the number of articles as those made up of metal?
- What is the total number of articles counted by the students?

Q9. The following table shows the average rainfall in the months of June to November in Mumbai:

Months	June	July	August	September	October	November
Rainfall(in cm)	15	60	55	40	25	20

Draw bar graph and answer the following questions:

- Name the months, which has rainfall more than 40cm.
- Name the months, which has rainfall less than or equal to 25cm.

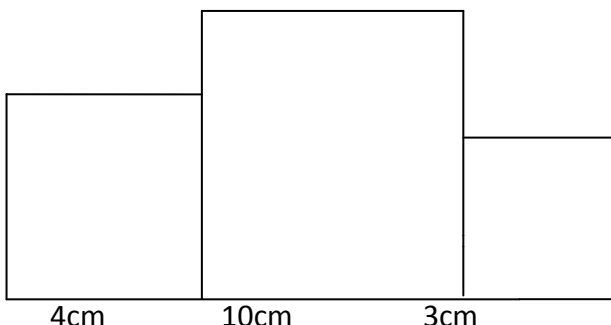
CHAPTER 10

MENSURATION

1. Perimeter of rectangle = $2 \times (\text{length} + \text{breadth})$
2. Area of rectangle = $\text{length} \times \text{breadth}$
3. Perimeter of square = $4 \times \text{side}$
4. Area of square = $\text{Side} \times \text{Side}$

WORKSHEET

- Q1.** Two sides AB and BC of ABC are 28cm and 38 cm respectively. Find the length of the side AC,if perimeter of ΔABC is 100 cm.
- Q2.** If the perimeter of rectangle is 170 cm and length is 50 cm. Find its breadth. Also find its area.
- Q3.** Parminder walks around the square park and covers 900 m. What will be the area of park?
- Q4.** Pinky runs around a square field of side 75 m. Bob runs around a rectangular field with length 160 m and breadth 105 m. Who covers more distance and by how much?
- Q5.** Four flower beds each of side 2 m are dug on a piece of land 7 m long and 5 m wide. What is the area of remaining part of land?
- Q6.** How many tiles of length and breadth of 12 cm and 5 cm respectively will be needed to fit in a rectangular region whose length and breadth are 70 cm and 36 cm ?
- Q7.** The lawn in front of Molly's house is $12 \text{ m} \times 8 \text{ m}$, whereas lawn in front of Dolly's house is $15 \text{ m} \times 5 \text{ m}$. Bamboo fencing is built around both the lawns. How much fencing is required for both?
- Q8.** The perimeter of field is 900 m . If length and breadth are in ratio 4 : 5, find the dimensions of the field.
- Q9.** Find the cost of leveling a rectangular park of length 315 m and breadth 250 m at the rate of Rs 6 per hundred square metre.
- Q10.** Three squares are joint together as shown in the figure. Their sides are 4 cm, 10 cm, 3 cm. Find the perimeter of the figure.



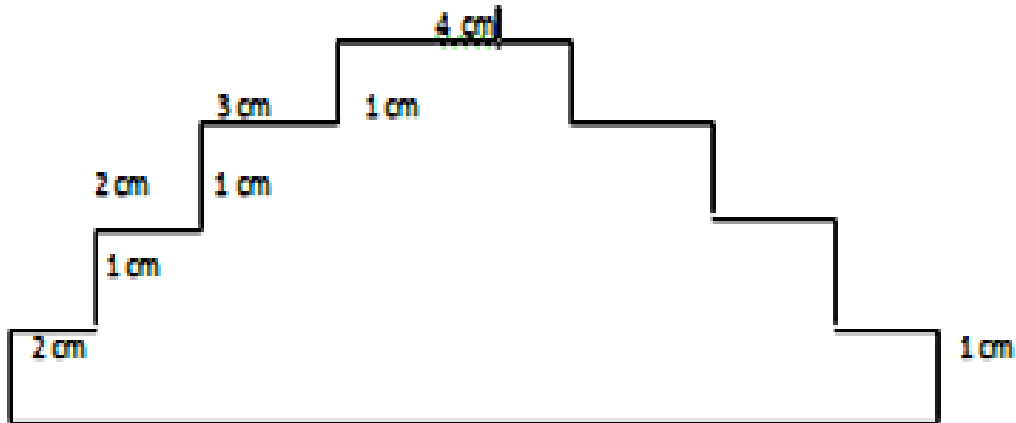
Q11. A rectangle and a square are equal in areas. The side of square is 12 m . Find the length of a diagonal if it is 9 m wide.

Q12. If you have the option of selecting a rectangular plot of size 130 m × 40 m or a square plot of size 70 m at the same price , which one will you prefer?

Q13. What will happen to the area of a square if its side is

- (a) Doubled (b) halved

Q14. Find the area of the figure :



Q15. A magazine charges Rs 300 per 10 sq cm. area for advertising. A company decided to order a half page for advertisement. If each page of the magazine of the dimension 15 cm × 24 cm , What amount the company has to pay for it?

CH-11
ALGEBRA

WORKSHEET

Q1. Write literals used in given equation:

a) $2y - 5$

b) $\frac{x}{3} + 2$

Q2. Side of a square is "s". Express its area and perimeter in terms of "s".

Q3. Give algebraic expressions:

a) 3 taken away from quotient of x by 8

b) Quotient of m by n added to its product.

Q4. Check whether '-3' is a solution of the equation: $-3z + 10 = 1$

Q5. Ram is 5 yrs younger than his elder brother, Sanjay. Express:

a) Ram's present age

b) Ram's age after 8 yrs.

c) If mother is 5 yrs more than 3 times of Ram's age.

(Assume: sanjay age as 'y' years.)

Q6. Write statement:

a) $\frac{y}{4} - 7 = 3$

b) $3x + 5 = 44$

Q7. Solve :

a) $-4z + 10 = 2$ b) $\frac{7x}{8} = 14$ c) $0.7 = 0.01x - 8$

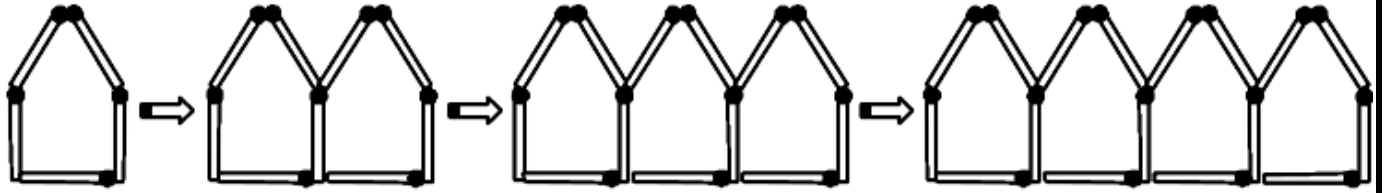
Q8. The score of Ishita's mathematics is 25 more than $\frac{2}{3}$ of her score of science. If she scores 'x' marks in science. Determine the score in maths.

Q9. Pick out the solution from the values given in the brackets. Shows that other values does not satisfy the equation: $3m+4=22$ (4,6,-6,0)

Q10. Rohan spends Rs. X daily and saves Rs. Y per week. What is the income of 3 weeks.

Q11. On my last birthday, I weighed 40 kg. If I put on m kg of weight every year, what it will be after 5 Years .

Q12. Observe the pattern and write an equation:

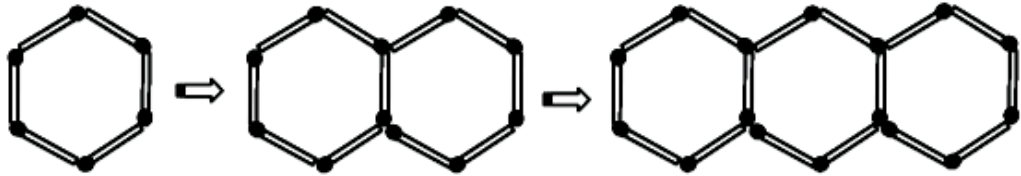


Picture 1

Picture 2

Picture 3

Picture 4



Picture 1

Picture 2

Picture 3

CHAPTER 12

RATIO AND PROPORTION

WORKSHEET

- Q1.** Find ratio a) Rs. 8 to 80 paise b) 8 hrs to 2 days
- Q2.** Find x , if $x : 8 = 12 : 32$
- Q3.** Determine , if following are in proportion : 20 km: 70 m and Rs. 8 : RS. 28. Write middle and extreme terms also.
- Q4.** Which ratio is large 10 : 21 or 21 : 93.
- Q5.** Ramesh earns Rs. 28000 per month and he saves Rs. 7000. Find the ratio of :
- a. Earning to his saving
 - b. Expenses to savings
- Q6.** A rectangular sheet of paper is 1.2m and 21 cm. Find the ratio of width to its length.
- Q7.** An alloy contains only zinc and copper are in ratio of 7:9 . If the weight of alloy is 8 kg. Find weight of copper in alloy.
- Q8.** A scooter travels 120 km in 3 hours and train travels 120 km into 2 hours. Find ratio of their speed.
- Q9.** If cost of a dozen soaps is Rs. 153.60 ,Find:
- a) What will be cost of 15 soaps .
 - b) How many soaps can we purchase by using Rs.128.
- Q10.** Divide 150 pencils among Ram and Rahul in ratio of 2:3.
- Q11.** Manju earn Rs.24000 in 8 months. Find:
- a) How much she earn in one year.
 - b) In how many months does she earn Rs. 42000
- Q12.** A car travels 90 kms in 2.5 hrs.
- a) How much time is required to cover 30 kms
 - b) Find the distance covered in 2 hrs.

CHAPTER-13

SYMMETRY

WORKSHEET

Q1 Give three examples of non - symmetrical object.

Q2 Write the letters of English alphabet that have both horizontal and vertical line of symmetry.

Q3 Draw a kite and draw its line of symmetry.

Q4 Name two quadrilaterals that have two line of symmetry.

Q5 A ceiling fan has 3 blades. How many lines of symmetry it has.

Q6 Draw and Write the name of triangle:

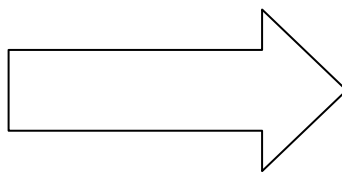
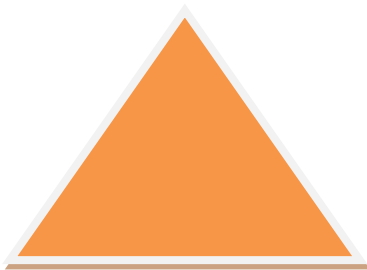
a) One line of symmetry b) Two line of symmetry c) No line of symmetry

Q7 A flower has 4 petals. How many lines of symmetry it has.

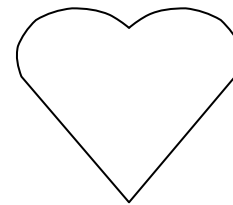
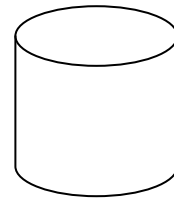
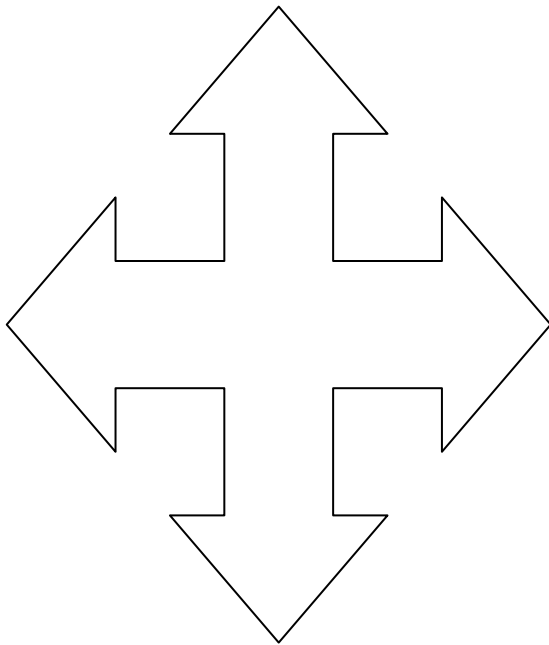
Q8 If we see the word "FIRE" in the mirror. How it looks?

Q9 Write the letter of English alphabet that has multiple line of symmetry.

Q10 Draw mirror image of Following figure:



Q11 Draw line of symmetry in following figure:



Q12 Write the digits from 0-9 that has

- a) No line of symmetry.
- b) One line of symmetry.
- c) Two line of symmetry.
- d) Three line of symmetry

CHAPTER- 14

PRACTICAL GEOMETRY

WORKSHEET

Q1 Draw a line segment AB of length 9cm. From A, cut off AP of length 3cm and from B, cut QB of length 4cm. Find the length of PQ.

Q2 Draw an angle $XYZ = 80^\circ$ with the help of protractor. Draw another angle PQR equal to XYZ with the help of compass. Now draw QT, bisector of PQR. Write measurement of TQR.

Q3 Draw a line segment PQ = 6cm. Mark a point R on it at a distance of 2cm from Q at R, Construct SRQ of measure 60° . Find measure of SRP.

Q4 If $AB = 3.5 \text{ cm}$, $CD = 2.1 \text{ cm}$. Construct a line segment whose length is equal to:-

- a) $XY = CD + AB$
- b) $MN = AB - CD$

Q5 Draw an isosceles triangle ABC, Using ruler and compass construct a perpendicular from A to side BC

Q6 Draw a line segment of 10cm. Divide it into 4 equal parts. Write the measure of each part.

Q7 Draw a line segment PQ length 6cm. Construct $RPQ = 30^\circ$ and $RQP = 45^\circ$, using ruler and compass. Construct a perpendicular to PQ, from R.

Q8 Construct an angle 135° and draw its line of symmetry.

Q9 Draw a circle of radius 4.5 cm. Draw its two chords PQ and XY. Draw perpendicular bisector of these chords. Where do they meet?

Q10 Draw a line segment AB of length 8cm. At each end of this line segment, draw a line perpendicular to AB. Are these two lines parallel?