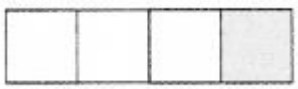
પુ•ના International School
Shree Swaminarayan Gurukul, Zundal

SA -II QUESTION BANK (2022-23)	
Grade – VI	**Subject- MATHS**
Syllabus – CH – 6,7,8,9,10,11,12,13	**FROM TEXTBOOK**

CH-7. Fractions

Multiple Choice Questions:

1) The fraction representing the shaded portion is



(a) $\frac{1}{4}$ (b) $\frac{3}{4}$ (c) $\frac{1}{2}$ (d) $\frac{1}{8}$

2) What fraction of ₹ 1 is 50 paise?

(a) $\frac{1}{4}$ (b) $\frac{3}{4}$ (c) $\frac{2}{1}$ (d) $\frac{1}{10}$

3) What fraction of a day is 12 hours?

(a) $\frac{1}{4}$ (b) $\frac{1}{3}$ (c) $\frac{1}{2}$ (d) $\frac{1}{10}$

4) Express $\frac{9}{4}$ as a mixed fraction

(a) $2\frac{1}{4}$ (b) $3\frac{1}{4}$ (c) $4\frac{1}{4}$ (d) $5\frac{1}{4}$

5) Which of the following fraction is equivalent to $\frac{3}{4}$

(a) $\frac{6}{11}$ (b) $\frac{9}{11}$ (c) $\frac{15}{20}$ (d) $\frac{21}{25}$

6) Apala typed 50 pages of a book containing 100 pages. Meenu typed 25 pages of the same book. Who typed more?

(a) Apala (b) Meenu (c) Both (d) none of these

7) A teacher finished $\frac{3}{4}$ of his course. How much course is left?

(a) $\frac{1}{2}$ (b) $\frac{1}{4}$ (c) $\frac{1}{6}$ (d) $\frac{1}{3}$

8) Apala bought 21/2 kg of potatoes whereas Meenu bought 11/2 kg of potatoes. Find the total amount of potatoes purchased by Apala and Meenu both.

(a) 1 kg (b) 2 kg (c) 3 kg (d) 16 kg

9) $1\frac{1}{2} + 2\frac{1}{2} =$

(a)1 (b)2 (c)3 (d)4

10) The equivalent fraction of $\frac{2}{5}$ with numerator 4 is

(a) $\frac{4}{10}$ (b) $\frac{4}{12}$ (c) $\frac{4}{16}$ (d) $\frac{4}{20}$

Very Short Questions:

1) Write natural numbers from 2 to 12. What fraction of them are prime numbers?

2) Draw number line and locate points on them
   (a) $\frac{1}{2}, \frac{1}{4}, \frac{3}{4}, \frac{4}{4}$
   (b) $\frac{2}{5}, \frac{3}{5}, \frac{8}{5}, \frac{4}{5}$
3) Express following as mixed fractions
   (a) $\frac{20}{3}$ (b) $\frac{19}{6}$ (c) $\frac{35}{9}$
4) Express following as improper fractions
   (a) $7\frac{3}{4}$ (b) $9\frac{3}{7}$ (c) $8\frac{4}{9}$
5) Reduce following fractions to simplest form:
   (a) $\frac{150}{60}$ (b) $\frac{12}{52}$ (c) $\frac{84}{98}$
6) Replace ☐ in each of the following by the correct number:
   (a) $\frac{2}{7} = \frac{8}{\square}$ (b) $\frac{45}{60} = \frac{15}{\square}$ (c) $\frac{2}{7} = \frac{8}{\square}$
7) Add:
   (a) $2\frac{4}{5}$ and $3\frac{5}{6}$ (b) $\frac{8}{15}$ and $\frac{3}{15}$ (c) $\frac{4}{9}$ and $\frac{2}{7}$
8) Find:
   (a) $\frac{2}{3} + \frac{3}{4} + \frac{1}{2}$ (b) $\frac{16}{5} - \frac{7}{5}$ (c) $\frac{4}{3} - \frac{1}{2}$
9) Find:
   (a) Is $\frac{5}{9}$ equal to $\frac{4}{5}$? (b) Is $\frac{1}{15}$ equal to $\frac{4}{30}$?
10) Compare $\frac{5}{16}$ and $\frac{13}{15}$

Long Questions:

1) Kristin received a CD player for her birthday. She bought 3 CDs and received 5 others as gifts. What fraction of her total CDs did she buy and what fraction did she receive as gifts?
2) In a class A of 25 students, 20 passed with 60% or more marks; in another class B of 30 students, 24 passed with 60% or more marks. In which class was a greater fraction of students getting with 60% or more marks?
3) Ila read 25 pages of a book containing 100 pages. Lalita read $\frac{2}{5}$ of the same. Who read less?
4) Ramesh had 20 pencils, Sheelu had 50 pencils and Jamaal had 80 pencils. After 4 months, Ramesh used up 10 pencils, Sheelu used up 25 pencils and Jamaal used up 40 pencils. What fraction did each use up? Check if each has used up an equal fraction of her/his pencils?
5) Shubham painted $\frac{2}{3}$ of the wall space in his room. His sister Madhavi helped and painted $\frac{1}{3}$ of the wall space. How much did they paint together?
6) Naina was given $1\frac{1}{2}$ piece of cake and Najma was given $1\frac{1}{3}$ piece of cake. Find the total amount of cake was given to both of them.
7) Jaidev takes $2\frac{1}{5}$ minutes to walk across the school ground. Rahul takes $\frac{7}{4}$ minutes to do the same. Who takes less time and by what fraction?

8) Javed was given $\frac{5}{7}$ of a basket of oranges. What fraction of oranges was left in the basket?

9) Nandini's house is $\frac{9}{10}$ km from her school. She walked some distance and then took a bus for $\frac{1}{2}$ km to reach school. How far did she walk?

10) Arya, Abhimanyu, and Vivek shared lunch. Arya has brought two sandwiches, one made of vegetable and one of jam. The other two boys forgot to bring their lunch. Arya agreed to share his sandwiches so that each person will have an equal share of each sandwich.

(a) How can Arya divide his sandwiches so that each person has an equal share?

(b) What part of a sandwich will each boy receive?

CH – 8. Decimals

Multiple Choice Questions:

1) Two tens and two Tenths

(a) 20.2 (b) 2.02 (c) 202 (d) none of these

2) $2\frac{1}{10}$ =

(a) 2.1 (b) 2.01 (c) 2.001 (d) 2.0002

3) 1.5 =

(a) $\frac{1}{2}$ (b) $\frac{3}{2}$ (c) $\frac{5}{2}$ (d) $\frac{7}{2}$

4) 2 cm 2 mm=

(a) 2.2 cm (b) 0.22 cm (c) 2.1 cm (d) 2.2 cm

5) Between which two whole numbers on the number line does the number 0.5 lie?

(a) -1 and 0 (b) 0 and 1 (c) 1 and 2 (d) 2 and 3

6) 0.625 =

(a) $\frac{1}{8}$ (b) $\frac{2}{8}$ (c) $\frac{3}{8}$ (d) $\frac{5}{8}$

7) 1 kg 500 g

(a) 1.5 kg (b) 1.05 kg (c) 1.005 kg (d) 1.0005 kg

8) 8 cm =

(a) 0.8 m (b) 0.08 m (c) 0.008 m (d) 0.0008 m

9) $\frac{2}{10}$ =

(a) 0.2 (b) 0.02 (c) 0.002 (d) 0.002

Very Short Questions:

1) Write following decimals in place value chart:

(a) 19.4 (b) 10.6 (c) 205.9 (d) 200.812

2) Write following decimals as fractions. Reduce to lowest term.

(a) 138.7 (b) 21.2 (c) 6.4 (d) 0.125 (e) 0.066

3) Write following as decimals:

(a) $20 + 9 + \frac{4}{10} + \frac{1}{100}$

(b) $700 + 20 + 5 + \frac{9}{100}$

(c) $\frac{7}{10} + \frac{6}{100} + \frac{4}{1000}$

4) Express as rupees using decimals: (a) 50 rupees 90 paise (b) 725 paise

5) Express as km using decimals: (a) 70 km 5 meter (b) 8888 m

6) Express as kg using decimals: (a) 26 kg 50 g (b) 3750 kg

7) Find sum:

(a) 280.69 + 25.2 + 38

(b) 27.056 + 0.55 + 0.004

(c) 0.75 + 10.425 + 2

8) Subtract:

(a) 0.314 kg from 2.107 kg

(b) 202.54 m from 250 m

9) Show following on number line: (a) 1.9 (b) 2.5

Long Questions:

1) Radhika's mother gave her ₹ 10.50 and her father gave her ₹ 15.80, find the total amount given to Radhika by the parents.

2) Naresh walked 2 km 35 m in the morning and 1 km 7 m in the evening. How much distance did he walk in all?

3) Ravi purchased 5 kg 400 g rice, 2 kg 20 g sugar and 10 kg 850 g flour. Find the total weight of his purchases

4) Raju bought a book for ₹ 35.65. He gave ₹ 50 to the shopkeeper. How much money did he get back from the shopkeeper?

5) Tina had 20 m 5 cm long cloth. She cuts 4 m 50 cm length of cloth from this for making a curtain. How much cloth is left with her?

6) Aakash bought vegetables weighing 10 kg. Out of this, 3 kg 500 g is onions, 2 kg 75 g is tomatoes and the rest is potatoes. What is the weight of the potatoes?

CH – 9. Data Handling

Multiple Choice Questions:

Observe the following table and answer the related questions:

Blood groups	Number of students
A	9
B	6
O	12
AB	3
Total	30

1) Which blood group is the most common?

(a) A (b) B (c) O (d) AB

2) Which blood group is the rarest?

(a) AB (b) A (c) B (d) O

3) What is total number of students?

(a) 10 (b) 15 (c) 20 (d) 30

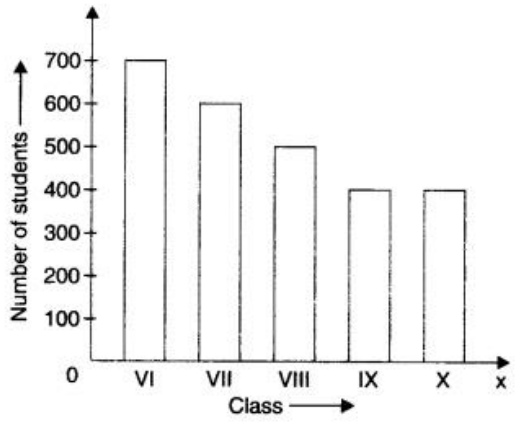
4) The maximum frequency is

(a) 3 (b) 6 (c) 9 (d) 12

5) The minimum frequency is

(a) 3 (b) 6 (c) 9 (d) 12

Observe the following bar graph and answer the related questions:



6) In which class is the number of students maximum?

(a)VI (b) VIII (c) IX (d) X

7) In which class/classes is the number of students minimum?

(a) IX, X (b) VI (c) VII (d) VIII

8) In which classes is the number of students are same?

(a) IX,X (b) VI, VII (c) VIII,IX (d) VI,X

9) What is the difference between the maximum and the minimum number of students?

(a) 100 (b) 200 (c) 300 (d) 400

10) In which class is the number of students 500?

(a) VII (b) VIII (c) IX (d) X

Long Questions:

1) Following is the choice of sweets of 30 students of Class VI.

Ladoo, Barfi, Ladoo, Jalebi, Ladoo, Rasgulla, Jalebi, Ladoo, Barfi, Rasgulla, Ladoo, Jalebi, Jalebi, Rasgulla, Ladoo, Rasgulla, Jalebi, Ladoo, Rasgulla, Ladoo, Ladoo, Barfi, Rasgulla, Rasgulla, Jalebi, Rasgulla, Ladoo, Rasgulla, Jalebi, Ladoo.

(a) Arrange the names of sweets in a table using tally marks.

(b) Which sweet is preferred by most of the students?

2) Following pictograph shows the number of tractors in five villages.

Village	Number of tractors  - 1 Tractor
Village A	
Village B	
Village C	
Village D	
Village E	

Observe the pictograph and answer the following questions.

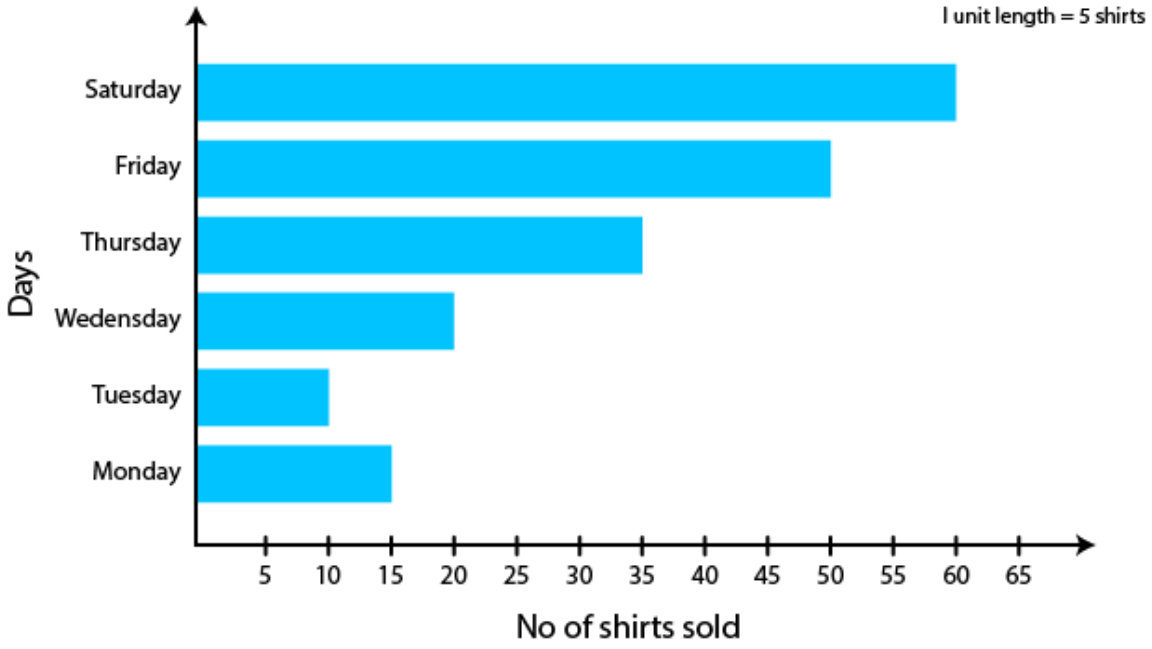
(a) Which village has the minimum number of tractors?

(b) Which village has the maximum number of tractors?

(c) How many more tractors village C has as compared to village B?

(d) What is the total number of tractors in all the five villages?

3) Observe this bar graph which is showing the sale of shirts in a ready made shop from Monday to Saturday



Now answer the following questions:

(a) What information does the above bar graph give?

(b) What is the scale chosen on the horizontal line representing number of shirts?

(c) On which day were the maximum number of shirts sold? How many shirts were sold on that day?

(d) On which day were the minimum number of shirts sold?

(e) How many shirts were sold on Thursday?

4) The number of Mathematics books sold by a shopkeeper on six consecutive days is shown below:

Days	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
Number of books sold	65	40	30	50	20	70

Draw a bar graph to represent the above information choosing the scale of your choice.

5) Total number of animals in five villages are as follows:

Village A : 80

Village B : 120

Village C : 90

Village D : 40

Village E : 60

Prepare a pictograph of these animals using one symbol ⊗ to represent 10 animals and answer the following questions:

(a) How many symbols represent animals of village E?

(b) Which village has the maximum number of animals?

(c) Which village has more animals: village A or village C?

CH – 10. Mensuration

Multiple Choice Questions:

1) Perimeter of a regular hexagon =
(a) 3 × side (b) 4 × side (c) 5 × side (d) 6 × side

2) Area of a square =

(b) Side × side (b) 3 × side (c) 4 × side (d) 5 × side

3) Apala went to a park 20 m long and 10 m wide. She took one complete round of it. The distance covered by her is

(a) 10 (b) 20 (c) 30 (d) 60

4) Meenu wants to put a lace border all around a rectangle table cover 2 m long and 1 m wide. Find the length of the lace required by Meenu.

(a) 3 m (b) 4 m (c) 5 m (d) 6 m

5) Find the cost of fencing a rectangular park of length 10 m and breadth 5 m at the rate of Rs. 10 per meter

(a) Rs.150 (b) Rs.300 (c) Rs.600 (d) Rs.1200

6) Find the distance travelled by Sangeeta if she takes 5 rounds of a square park of side 10m.

(a) 100 m (b) 200 m (c) 400 m (d) 800 m

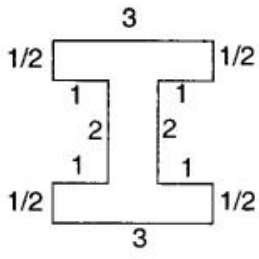
7) Two sides of a triangle are 5 cm and 4 cm. The perimeter of the triangle is 12 cm. The third side has length

(a) 1 cm (b) 2 cm (c) 3 cm (d) 6 cm

8) The area of a side of a square 1 cm is

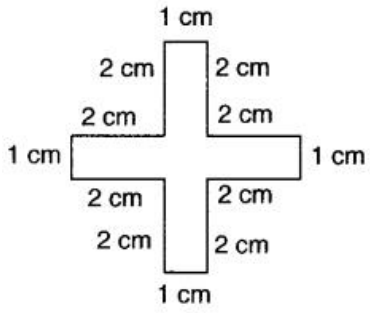
(a) 1 cm^2 (b) 4 cm^2 (c) 9 cm^2 (d) 16 cm^2

9) The area of the figure is



(a) 5 sq. unit (b) 7 sq. unit (c) 8 sq. unit (d) 9 sq. unit

10) The perimeter of a figure is



(a) 5 cm (b) 10 cm (c) 15 cm (d) 20 cm

Long Questions:

1) A table top measures 2 m 25 cm by 1 m 50 cm. What is the perimeter of the table top?
2) Find perimeter of a triangle of sides 3 cm, 4 cm, 5 cm
3) Find perimeter of an isosceles triangle with equal sides 8 cm each and third side 6 cm.
4) Find side of a square whose perimeter is 20 m.
5) Find area of rectangle whose sides are 3 cm and 4 cm.
6) Find area of square whose sides are 10 cm.
7) A piece of string is 30 cm long. What will be the length of each side if the string is used to form (a) a square (b) an equailateral triangle (c) a regular hexagon
8) Find the cost of fencing a square park of side 250 m at the rate of Rs.20 per meter.
9) Sweety runs around a square park of side 75 m. Bulbul runs around a rectangular park with length 60 m and breadth 45 m. Who covers less distance?
10) Find the area in square meter of a piece of cloth 1m 25 cm wide and 2 m long.
11) The length and breadth of three rectangles are as given below:
    (a) 9 m and 6 m (b) 17 m and 3 m (c) 4 m and 14 m

    Which one has the largest area and which one has the smallest?

12) A table top measures 2 m by 1 m 50 cm. What is its area in square metres?
13) A floor is 5 m long and 4 m wide. A square carpet of sides 3 m is laid on the floor. Find the area of the floor that is not carpeted.
14) Five square flower beds each of sides 1 m are dug on a piece of land 5 m long and 4 m wide. What is the area of the remaining part of the land?
15) What is the cost of tiling a rectangular plot of land 500 m long and 200 m wide at the rate of Rs.8 per hundred sq m.?

CH – 11. Algebra

Multiple Choice Questions:

1) The rule, which gives the number of matchsticks required to make the matchstick pattern L, is
   (a) 2n (b) 3n (c) 4n (d) 5n
2) The rule, which gives the number of matchsticks required to make the matchstick pattern U, is
   (a) 2n (b) 3n (c) 4n (d) 5n

3) The rule, which gives the number of matchsticks required to make the matchstick pattern S, is
(a) 3n (b) 4n (c) 5n (d) 6n
4) The side of an equilateral triangle is L. Its perimeter is
(a) L (b) 2 L (c) 3 L (d) 6 L
5) The radius of a circle is r. Its diameter is
(a) 2r (b) 3 r (c) 4 r (d) 6 r
6) Which of the following is an expression with numbers only?
(a) X + 1 (b) 2 x (c) 1 – x (d) 3
7) The expression for '1 added to p' is
(a) P + 1 (b) p – 1 (c) 1 – p (d) -1 – p
8) The expression for 'p multiplied by 2' is
(a) P + 2 (b) p -2 (c) 2p (d) $\frac{p}{2}$
9) The expression for ' 1 subtracted from 2p' is
(a) 2p + 1 (b) 2p -1 (c) 1 – 2p (d) -2p -1
10) The expression for 'x is divided by 2 and the result is added to 1' is
(a) 2 + x (b) 2 – x (c) 1 + $\frac{x}{2}$ (d) 1 – $\frac{x}{2}$
11) If Apala's present age is x years, what will be her age in years after 20 years from now?
(a) x + 20 (b) x – 20 (c) 20x (d) $\frac{x}{20}$
12) If Meenu's present age is x years, what was her age in years, 10 years back?
(a) x -10 (b) 10 – x (c) –x – 10 (d) 10x

Long Questions:

1) If the age of Hari Kishan is two times the age of Manish (which is x years), then find the age of Hari Kishan, in years.
2) Solve: p + 1 = 2
3) Solve: m – 2 = 3
4) Pick out the solution from the values given in the bracket next to each equation. Show that the other values do not satisfy the equation.

(a) 5m = 60 (10, 5, 12, 15)

(b) n + 12 (12, 8, 20, 0)

(c) $\frac{q}{2}$ = 7 (7, 2, 10, 14)

5) Complete the table and by inspection of the table, find the solution to the equation 5t = 35

t	3	4	5	6	7	8	9	10	11
5t	—	—	—	—	—	—	—	—	—

7) Complete the table and by inspection of the table find the solution to the equation

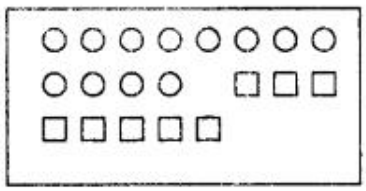
m + 10 = 16.

m	1	2	3	4	5	6	7	8	9	10
m + 10	—	—	—	—	—	—	—	—	—	—

CH – 12. Ratio and Proportion

Multiple Choice Questions:

1) The monthly salary of Hari Kishan is Rs. 80000. The monthly salary of Manish is Rs. 40000. How many times of the salary of Manish is the salary of Hari Kishan?
   (a) 2 times (b) 3 times (c) 4 times (d) 8 times
2) The monthly salary of Hari Kishan is Rs. 80000. The monthly salary of Manish is Rs. 40000. What is ratio of the salary of Manish is the salary of Hari Kishan?
   (a) 1 : 2 (b) 3 : 2 (c) 2 : 5 (d) 3 : 5
3) There are 25 boys and 25 girls in a class. The ratio of the number of boys to the total number of students is
   (a) 1 : 2 (b) 1 : 3 (c) 2 : 3 (d) 3 : 2
4) The speed of Shubham is 6 km per hour. The speed of Yash is 2 km per hour. The ratio of the speed of Shubham to the speed of Yash is
   (a) 2 : 3 (b) 3 :1 (c) 1 : 3 (d) 3 :2
5) The ratio 40 cm to 1 m is
   (a) 5 : 2 (b) 2: 5 (c) 3: 5 (d) 4 : 5
6) Which of the following ratios is equivalent to 2:3?
   (a) 4 : 8 (b) 4 : 9 (c) 6 : 9 (d) 6 :12
7) Find the ratio of number of circles and number of squares inside the following rectangle:



   (a) 3 : 1 (b) 2 :1 (c) 2 : 3 (d) 3: 2
8) The ratio of 25 minutes to 1 hour is
   (a) 7 : 5 (b) 5 :12 (c) 12 : 5 (d) 5 : 7
9) Out of 30 students in a class, 20 like cricket and 10 like Hockey. The ratio of the number of students liking Hockey to the total number of students is
   (a) 3 : 1 (b) 1 : 3 (c) 2 : 3 (d) 1 : 2
10) The cost of 1 dozen bananas is ₹ 30. The cost of 6 oranges is ₹ 18. The ratio of the cost of a banana to the cost of an orange is
   (a) 2 : 3 (b) 3 : 2 (c) 6 : 5 (d) 5 : 6
11) Which of the following are in proportion?
   (a) 2:3::20:30 (b) 3:4::15:18 (c) 1:3::11:22 (d) 2:5::40:80
12) The cost of 10 notebooks is ₹ 100. The cost of 1 notebook is
   (a) Rs. 5 (b) Rs. 10 (c) Rs. 20 (d) Rs. 100

Long Questions:

1) There are 20 girls and 15 boys in a class.

   (a) What is the ratio of number of girls to the number of boys?

   (b) What is the ratio of number of girls to the total number of students in the class?

2) Distance travelled by Hamid and Akhtar in an hour are 9 km and 12 km. Find the ratio of speed of Hamid to the speed of Akhtar.

3) Find the ratio of the following:

   (a) 33 km to 121 km (b) 81 to 108

4) There are 102 teachers in a school of 3300 students. Find the ratio of the number of teachers to the number of students.

5) There are 102 teachers in a school of 3300 students. Find the ratio of the number of teachers to the number of students.

6) Cost of a dozen pens is Rs. 180 and cost of 8 ball pens is Rs. 56. Find the ratio of the cost of a pen to the cost of a ball pen.

7) Divide 20 pens between Sheela and Sangeeta in the ratio of 3: 2.

8) Present age of father is 42 years and that of his son is 14 years. Find the ratio of

   (a) Present age of father to the present age of son

   (b) Age of the father to the age of son, when son was 12 years old.

   (c) Age of father after 10 years to the age of son after 10 years.

   (d) Age of father to the age of son when father was 30 years old.

9) Determine if the following are in proportion: (a) 15: 45:: 40: 120

10) Ekta earns Rs. 3000 in 10 days. How much will she earn in 30 days?

11) Cost of 5 kg of wheat is Rs. 91.50.

   (a) What will be the cost of 8 kg of wheat?

   (b) What quantity of wheat can be purchased in Rs. 183?

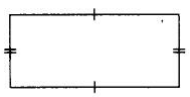
12) Anish made 42 runs in 6 overs and Anup made 63 runs in 7 overs. Who made more runs per over?

13) A truck requires 108 litres of diesel for covering a distance of 594 km. How much diesel will be required by the truck to cover a distance of 1650 km?

CH – 13. Symmetry

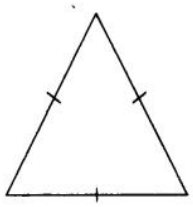
Multiple Choice Questions:

1) How many lines of symmetry does the figure have?



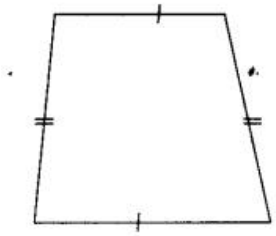
(a) 1 (b) 2 (c) 3 (d) 4

2) How many lines of symmetry does the figure have?



(a) 1 (b) 2 (c) 3 (d) 4

3) How many lines of symmetry does the figure have ?



(a) 1 (b) 2 (c) 3 (d) no line of symmetry

4) How many lines of symmetry does a regular hexagon have?

(a) 1 (b) 3 (c) 4 (d) 6

5) Which of the following letters has horizontal line of symmetry?

(a) Z (b) V (c) U (d) E

6) Which of the following letters has vertical line of symmetry?

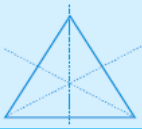
(a) N (b) K (c) B (d) M

7) Which of the following letters has no line of symmetry?

(a) O (b) X (c) I (d) Q

Long Questions:

1) Complete the following table.

Shape	Rough figure	Number of lines of symmetry
Equilateral triangle		3
Square		
Rectangle		
Isosceles triangle		
Rhombus		
Circle		

2) Can you draw a triangle which has

(a) Exactly one line of symmetry

(b) Exactly two line of symmetry

(c) Exactly three line of symmetry

(d) No lines of symmetry

Sketch a rough figure in each case