



**ASSIGNMENT OF SUMMATIVE 2 (2021-22)**

**CLASS-V1**

**SUB-MATHS**

**Multiple Choice Questions:**

**[1 MARK QUESTION]**

**Chap 7**

- The fraction which is not equal to  $\frac{4}{5}$  is  
a.  $\frac{40}{50}$                       b.  $\frac{12}{15}$                       c.  $\frac{16}{20}$                       d.  $\frac{9}{15}$
- If  $\frac{5}{8} = \frac{20}{p}$ , then value of p is  
a. 23                      b. 2                      c. 32                      d. 16
- Sum of  $\frac{4}{17}$  and  $\frac{15}{17}$  is  
a.  $2\frac{1}{17}$                       b.  $1\frac{1}{17}$                       c.  $3\frac{1}{17}$                       d.  $1\frac{2}{17}$
- Which of the following fraction is smallest?  
a.  $\frac{16}{23}$                       b.  $\frac{17}{23}$                       c.  $\frac{9}{23}$                       d.  $\frac{11}{23}$
- Which of the following is not in the lowest form?  
a.  $\frac{7}{5}$                       b.  $\frac{15}{20}$                       c.  $\frac{13}{33}$                       d.  $\frac{27}{28}$

**Chap 8**

- 0.023 lie between  
a. 0.2 and 0.3                      b. 0.02 and 0.03                      c. 0.03 and 0.029                      d. 0.026 and 0.024
- 0.74 99 lies between  
a. 0.7 and 0.74                      b. 0.75 and 0.79                      c. 0.749 and 0.75                      d. 0.74992 and 0.75
- The decimal 0.238 is equal to the fraction  
a.  $\frac{119}{500}$                       b.  $\frac{238}{25}$                       c.  $\frac{119}{25}$                       d.  $\frac{119}{60}$
- Which of the following decimal is the smallest?  
a. 0.37                      b. 1.52                      c. 0.087                      d. 0.105
- $0.07 + 0.008$  is equal to  
a. 0.15                      b. 0.015                      c. 0.078                      d. 0.78

## Chap – 9

Fore question number 1 to 5 the marks obtained by 10 student in science test are given below:  
53, 36, 95, 73, 62, 42, 25, 78, 75, 62

Answer the following questions that are related to the given data

- The maximum marks obtained by the student is  
a. 60                      **b. 95**                      c. 78                      d. 25
- The minimum marks obtained by the student is  
a. 42                      b. 36                      **c. 25**                      d. 73
- How many students got the same marks?  
a. 3                      b. 4                      **c. 2**                      d. None
- How many students got 78 are more marks?  
**a. 2**                      b. 3                      c. 4                      d. 1
- How many student got marks below 62?  
a. 3                      **b. 4**                      c. 5                      d. 2

## Chap 10.

- The perimeter of a triangle whose sides are 1.2cm, 3.4 cm and 1.7 cm, is  
**a. 6.3cm**                      b. 6.2cm                      c. 6.5cm                      d. 6.4cm
- The perimeter of a rectangle, whose sides are 130 cm and 70 cm, is  
a. 20m                      **b. 4m**                      c. 0,2m                      d. 2m 30cm
- The side of a square is 10 centimetre. How many times wills the new perimeter becomes, if the side of the square is doubled?  
**a. 2 times**                      b. 4 times                      c. 6 times                      d. 8 times
- The perimeter of an equilateral triangle of side 5 cm each is  
a.  $\frac{\sqrt{3}}{4} \times 15$  cm                      b.  $\frac{\sqrt{3}}{4} \times 10$  cm                      c. 10 cm                      **d. 15 cm**
- Cost of fencing of a rectangular Park of length 200 and width 150 at the rate of rupees 25per meter is  
**a. Rs 17500**                      b. Rs 1750                      c. Rs 1705                      d. Rs 10750

## Chap 11

- Give, expression for P divided by 15 is  
a. P -15                      b. P + 15                      **c.  $\frac{p}{15}$**                       d. P X15
- Which out of the following are expression which numbers only?  
a.  $2x + 5$                       b.  $3x - 5$                       **c.  $3(11 - 5) + 5 \times 2$**                       d.  $3Y + 5$
- Take meena's present age to be y year, what is his father's age if he is double of her age?  
a.  $y + 2$                       b.  $y - 2$                       c.  $y / 2$                       **d. 2y**
- If each match box contains 50 matchstick, the number of the matchsticks required to fill n such boxes is  
a.  $50 + n$                       **b. 50 n**                      c.  $50 / n$                       d.  $50 - n$
- Which of the following represents  $6 \times x$  ?  
**a. 6x**                      b.  $\frac{x}{6}$                       c.  $6 + x$                       d.  $6 - x$

## Chap 12

- The ratio of 6 books to 30 books is  
a. 5 : 1                      b. 2 : 3                      **c. 1 : 5**                      d. 2 : 5

2. If  $66:72::x:96$ , then  $x$  is equal to

- a. 108                      b. 78                      c. 88                      d. 48

3. In a box, the ratio of red marbles to blue marbles is 7: 4. Which of the following could be the total number of marbles?

- a. 18                      b. 10                      c. 21                      d. 22

4. The ratio of the number of sides of a triangle to the number edges of a cube is

- a. 4:1                      b. 1:4                      c. 1:3                      d. 2:3

5. If  $7:30::x:15$ , then  $x$  is equal to

- a.  $\frac{7}{2}$                       b.  $\frac{2}{7}$                       c. 6                      d. 7

**Fill the blank:**

**[1 MARK QUESTION]**

### Chap - 7

1. A number representing a part of a -----is called a fraction. ( whole)
2. A fraction with numerator greater than the denominator is called an ----- fraction.( improper)
3. Fractions with the same denominators are called----- fractions .(like)
4.  $13\frac{5}{18}$  is a----- Fraction. (Mixed)
5. 1 whole = ----- tenths. (10)

### Chap 8

1. 2 km 590 m is equal to----- km. ( 2.590km)
2. The value of  $3.64 - 1.2$  is\_----- ( 2.36)
3. The value of 50 coins of 50 paise = Rs ----- (25)
4. 3Hundredths +2 tenths = ----- ( 0.23)
5.  $4.56 + 9.25 =$  ----- (13.81)

### Chap 9

1. A \_\_\_\_\_ is a collection of numbers gathered to give some meaningful information, (
2. The data can be arranged in a tabular for using \_\_\_\_\_ marks
3. A \_\_\_\_\_ represent data through picture of objects,
4. Representation of data in form of picture is called \_\_\_\_\_
5. In bar graph, width of rectangle is always \_\_\_\_\_

### Chap 10

1. The region enclosed by a plane closed figure is called its \_\_\_\_\_
2. Area of a rectangle with length 5 cm and breadth 3cm is \_\_\_\_\_
3. Diagonal of a square is \_\_\_\_\_ side.
4. Standard unit of area is \_\_\_\_\_
5. The area of a playground is 1190 metre square. If its length is 35 metre, the width is \_\_\_\_\_

## Chap 11

1. The variable can take \_\_\_\_\_ values.
2. The values of the variable in an equation which satisfies the equation is called a \_\_\_\_\_ to the equations.
3. An \_\_\_\_\_ has two sides, left hand side and right hand side, between them is the equal sign
4. The LHS of an \_\_\_\_\_ is equal to its RHS only for a definite value of the variable in the equations.
5. The distance (in km) travel in h hours at a constant speed of 40 km per hour is \_\_\_\_\_

## Chap 12

1. The cost of 4 pens is Rs 40. The cost of 11 pens is \_\_\_\_\_
2. The weight of 15 boxes is 60 kg. The weight of 12 boxes is \_\_\_\_\_
3. Maya can walk 6 km in 2 hour. In 3 hour she can walk \_\_\_\_\_
4. To find the ratio of two quantities, they must be expressed in \_\_\_\_\_ unit.
5. Ratio of 5 paise to 25 paise is the same as the ratio of 20 paise to \_\_\_\_\_

**Tell whether the statement is true or false:[1 MARK QUESTION]**

### Chap – 7

1. Fraction  $19/39$  is in its lowest form. **True**
2. Fraction  $7/9$  and  $42/54$  equivalent fractions. **True**
3. Sum of two fractions is always a fraction. **False**
4. the result obtained by subtracting a fraction from another fraction is necessarily fraction. **False**
5. If a whole of an object is divided into a number of equal parts, then its part represents fraction. **True**

### Chap 8

1. In the decimal form, fraction  $25/8 = 3.125$ . **True**
2. The decimal  $23.2 = 23 \frac{2}{3}$  **False**
3. The place value of a digit at the tenth place Is  $1/10$  times the same digit at ones place. **True**
4. The place value of a digit at the hundredths place is  $1/10$  times the same digit at the tenths place. **True**
5. The decimal  $3.725$  is equal to  $3.72$  correct to two decimal places. **False**

### Chap -9

1. To represent the population of a different towns using bar graph, it is Convenient to take one unit length to represent one person.
2. Pictograph and bar graph are pictorial representation of numerical data.
3. An observation occurring five times in the data is recorded as iiii, using Tally marks.
4. In a bar graph, the width of bars may be an equal.
5. In a bar graph, each bar represents only one value of the numerical data.

### Chap – 10

1. The perimeter of a triangle whose sides are 1.2cm, 3.4 cm and 1.7 cm, is
2. The perimeter of a rectangle, whose sides are 130 cm and 70 cm is



- The side of a square is 10 centimetre. How many times will the new perimeter becomes, if the side of the square is doubled?
- The perimeter of an equilateral triangle of side 5 cm each is
- Cost of fencing of a rectangular Park of length 200 and width 150 at the rate of rupees 25 per meter is

**Chap-11**

- Total distance travelled by a car in  $x$  h at a constant speed of  $y$  km/h, is  $x$  h km.
- The perimeter of a square if each of its side is  $X$  units, is  $4x$  units.
- $2$  is the solution of the equation  $x + 4 = 5$ .
- The equation  $2x + 4 = 6$  and  $3x + 9 = 12$  have the same solution.
- In The equation  $7k - 7 = 7$ , the variable is  $7$ .

**Chap - 12**

- $4:7 = 20:35$
- $15m: 40-m = 40cm: 80cm$
- The ratio of  $20kg$  to  $200kg$  is  $1:10$ .
- The ratio  $8:40$  is in its lowest form.
- The ratio of  $10kg$  to  $100kg$  is  $1:10$ .

**Solve: Each carry one mark:**

**[1 MARK QUESTION]**

**Chap - 7**

- Write the fraction representing the shaded portion:

(i) A large inverted triangle divided into four smaller inverted triangles. The top and bottom triangles are shaded.

(ii) A large rectangle divided into a 3x3 grid of smaller rectangles. The central rectangle is unshaded, while the other eight are shaded.

(iii) A large rectangle containing eight circles arranged in two rows of four. The top row of circles is shaded.

(iv) A circle divided into four equal quadrants by two perpendicular diameters. The bottom-right quadrant is shaded.

(v) A large rectangle divided into four equal vertical strips. The top and bottom strips are shaded.

(vi) A large rectangle containing twelve stars arranged in three rows of four. The top two rows of stars are shaded.

(vii) A large rectangle containing ten pencils arranged in two rows of five. The top row of pencils is shaded.

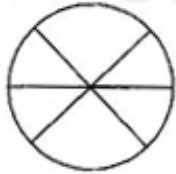
(viii) A large right-angled triangle divided into four smaller right-angled triangles by a vertical and a horizontal line. The two triangles at the corners of the right angle are shaded.

(ix) A flower-like shape with six petals. The top and bottom petals are shaded.

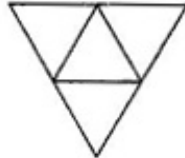
(x) A butterfly-like shape divided vertically into two halves. The left half is shaded.

**Answer:** (i)  $\frac{2}{4}$  (ii)  $\frac{8}{9}$  (iii)  $\frac{4}{8}$  (iv)  $\frac{1}{4}$  (v)  $\frac{3}{7}$   
 (vi)  $\frac{9}{12}$  (vii)  $\frac{10}{10}$  (viii)  $\frac{4}{9}$  (ix)  $\frac{4}{8}$  (x)  $\frac{1}{2}$

2. Color the part according to the given fraction:



(i)  $\frac{1}{6}$



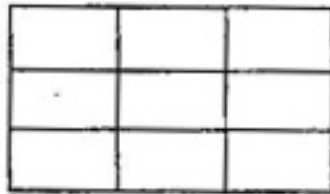
(ii)  $\frac{1}{4}$



(iii)  $\frac{1}{3}$

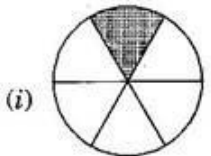


(iv)  $\frac{3}{4}$

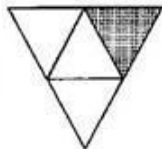


(v)  $\frac{4}{9}$

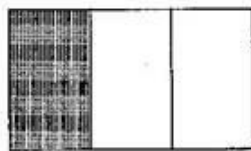
**Answer:**



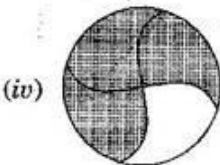
(i)



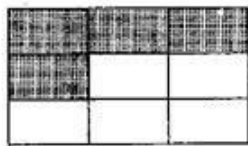
(ii)



(iii)



(iv)



(v)

3. Express the following as mixed fractions. (i)  $15\frac{1}{4}$  (ii)  $25\frac{5}{6}$

4. Express the following as improper fraction (i)  $5\frac{1}{4}$  (ii)  $7\frac{2}{3}$

5. Simplify (i)  $6 - \frac{3}{4}$  (ii)  $\frac{7}{12} - \frac{4}{15}$

**Chap 8**

6. Write three hundred five and four hundredth as decimal form

7. Write 2.4 as fraction in lowest terms.

8. Write  $200 + 40 + 5\frac{2}{100}$  as decimals.

9. Arrange the following decimals in a descending order:

a) 7.3, 8.73, 73.03, 7.33, 8.073

b) 8.88, 8.088, 888.8, 88.08, 8.008

10. Convert each of the following decimals as a mixed fraction: a) 7.5      b) 24.8      c) 13.25

## Chap-9

1. What is the range of data?

Ans: The difference of maximum and minimum value of given data is called the range of data.

2. Find the range of data 9, 7, 2, 6, 1, 3, 4, 12.

Ans: Range of data =  $12 - 1 = 11$

3. What kind of data is collected directly from a source?

Ans: Primary of data is collected directly from a source.

4. Find the range of data 8, 7, 5, 12, 17, 21, 4, 16.

Ans: Range of data =  $21 - 4 = 17$ .

5. What type of data is collected from newspaper?

Ans: Secondary data is collected from newspaper.

## Chap -10

1. Find the perimeter of a triangle, whose three sides are 5cm, 6cm and 7cm, respectively?

Ans: perimeter of a triangle =  $5\text{cm} + 6\text{cm} + 7\text{cm} = 18\text{cm}$ .

2. Find the perimeter of an equilateral triangle, whose each side is 5cm.

Ans : perimeter of an equilateral triangle =  $3 \times \text{side} = 3 \times 5\text{cm} = 15\text{cm}$ .

3. Find the area of a rectangle, whose length and width are 10cm and 6cm, respectively?

Ans: Area of a rectangle =  $l \times b = 10\text{cm} \times 6\text{cm} = 60 \text{sq.cm}$ .

4. Find the side of an equilateral triangle, if its perimeter is 30cm.

Ans: Side =  $\frac{\text{perimetre}}{3} = \frac{30\text{cm}}{3} = 10\text{cm}$ .

5. If the area of square is  $36\text{cm}^2$ , then find the side of square.

Ans: Side =  $\sqrt{36\text{cm}^2} = 6\text{cm}$ .

## Chap-11

Write the following using numbers, literal and basic arithmetic operations.

1. The sum of the numbers 5 and x.

Ans:  $5 + x = 5x$ .

2. 4 less than x.

Ans:  $(x - 4)$

3. 5 more than the number y.

Ans:  $y + 5$

4. Two fifth of a number Z.

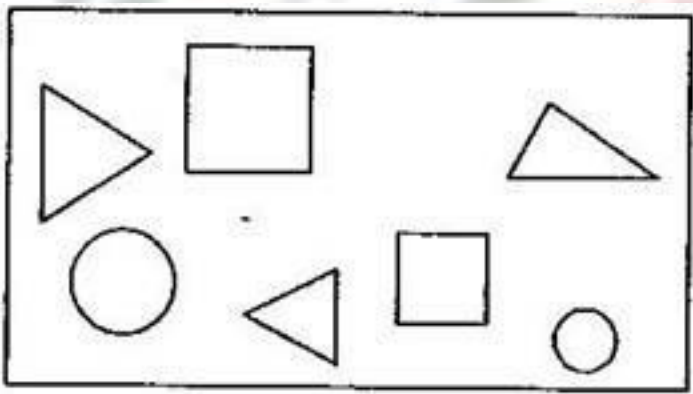
Ans:  $\frac{2}{5}Z$

5. The number 5 times the product of x and y.

Ans:  $5(x + y)$ .

### Chap-12

1. See the figure and find the ratio of



(a) The number of triangles to the number of circles inside the rectangle.

(b) The number of squares to all the figures inside the rectangle.

(c) The number of circles to all the figures inside the rectangle.

Answer: (a) Ratio of number of triangles to that of circles =  $\frac{3}{2} = 3 : 2$

(b) Ratio of number of squares to all figures =  $\frac{2}{7} = 2 : 7$

(c) Ratio of number of circles to all figures =  $\frac{2}{7} = 2 : 7$

2. Find the ratio of the following: (a) 81 to 108

(b) 98 to 63

(c) 33 km to 121 km

(d) 30 minutes to 45 minutes



**Answer:** (a) Ratio of 81 to 108 =  $27 \times 3 / 27 \times 4 = 3 : 4$

(b) Ratio of 98 to 63 =  $\frac{14 \times 7}{7 \times 9} = 14 : 9$

(c) Ratio of 33 km to 121 km =  $\frac{3 \times 11}{11 \times 11} = 3 : 11$

(d) Ratio of 30 minutes to 45 minutes =  $\frac{15 \times 2}{15 \times 3} = 2 : 3$

3. Determine the following are in proportion:

(a) 15, 45, 40, 120

(b) 33, 121, 9, 96

(c) 24, 28, 36, 48

(d) 32, 48, 70, 210

**Answer:** (a)  $15 : 45 = 1 : 3$  and  $40 : 120 = 1 : 3$

Since  $15 : 45 = 40 : 120$

Therefore 15, 45, 40, 120 are in proportion.

(b)  $33 : 121 = 3 : 11$  and  $9 : 96 = 3 : 32$

Since  $33 : 121 \neq 9 : 96$

Therefore, 33, 121, 9, 96 are not in proportion.

(c)  $24 : 28 = 6 : 7$  and  $36 : 48 = 3 : 4$

Since  $24 : 28 \neq 36 : 48$

Therefore 24, 28, 36, 48 are not in proportion.

(d)  $32 : 48 = 2 : 3$  and  $70 : 210 = 1 : 3$

Since  $32 : 48 \neq 70 : 210$

Therefore 32, 48, 70, 210 are not in proportion.

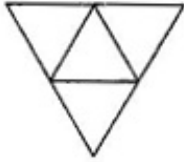
**Solve: Each carry two marks**

Chap – 7

1. Color the part according to the given fraction:



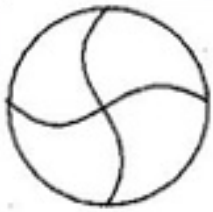
(i)  $\frac{1}{6}$



(ii)  $\frac{1}{4}$



(iii)  $\frac{1}{3}$

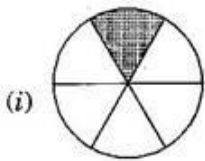


(iv)  $\frac{3}{4}$

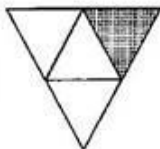


(v)  $\frac{4}{9}$

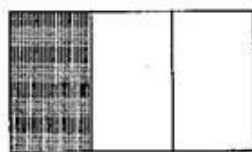
**Answer:**



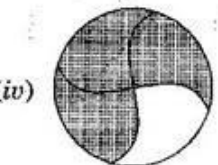
(i)



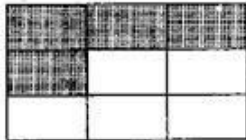
(ii)



(iii)



(iv)



(v)

2. Kanchan dyed 30 dresses. She had to dye 30 dresses. She has so far finished 20 dresses. What fraction of dresses has she finished?

**Answer:** Total number of dresses today = 30

Work completed = 20

Fraction of completed work =  $\frac{20}{30} = \frac{2}{3}$

3. Write the natural numbers from 2 to 12. What fraction of them are prime numbers?

**Answer:** Natural numbers from 2 to 12: 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12

Primenumbersfrom2to12:2,3,5,7,11

Hence, fraction of prime numbers =

4. Write the natural numbers from 102 to 113. What fraction of them is prime number?

**Answer:** Natural numbers from 102 to 113: 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113

Primenumbersfrom102to113:103,107,109,113

Hence fraction of prime numbers =  $\frac{4}{12} = \frac{1}{3}$

5. Draw number lines and locate the points on them:

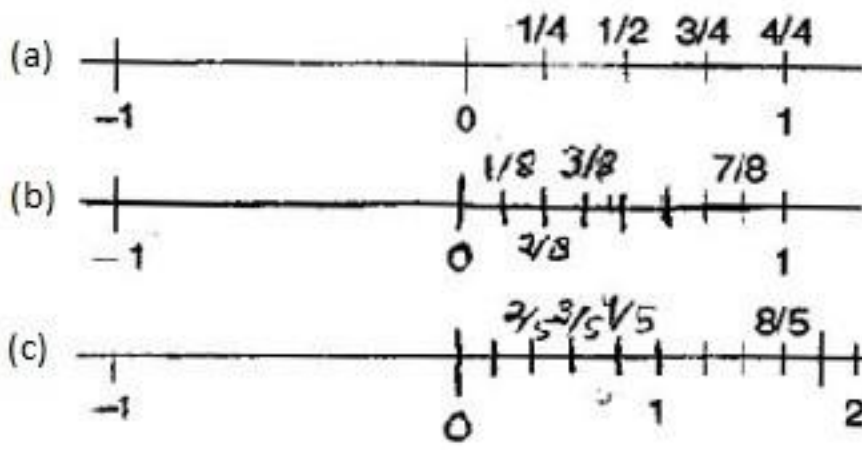
(a)

$$\frac{1}{2}, \frac{1}{4}, \frac{3}{4}, \frac{4}{4}$$

(b)  $\frac{1}{8}, \frac{2}{8}, \frac{3}{8}, \frac{7}{8}$

(c)  $\frac{2}{5}, \frac{3}{5}, \frac{8}{5}, \frac{4}{5}$

**Answer:**



CHAP -8

1. Write the following decimals in the place value table:

(a) 19.4

(b) 0.3

(c) 10.6

(d) 205.9

**Answer: (a)**

Hundreds	Tens	Once	Tenths
0	1	9	4

(b)

Hundreds	Tens	Once	Tenths
0	0	0	3

(c)

Hundreds	Tens	Once	Tenths
0	1	0	6

(d)

Hundreds	Tens	Once	Tenths
2	0	5	9

2. Write each of the following as decimals:

(a) seven-tenths

(b) Two tens and nine-tenths

(c) Fourteen point six

(d) One hundred and two-ones

(e) Six hundred point eight

**Answer:** (a) seven-tenths = 7 tenths =  $\frac{7}{10} = 0.7$

(b) 2 tens and 9-tenths =  $2 \times 10 + \frac{9}{10} = 20 + 0.9 = 20.9$

(c) Fourteen point six = 14.6

(d) One hundred and two-ones =  $100 + 2 \times 1 = 100 + 2 = 102$



(e) Sixhundredpointeight=600.8

3. Write the following decimals as fraction. Reduce the fractions to lowest terms:

(a) 0.6

(b) 2.5

(c) 1.0

(d) 3.8

**Answer:** (a)  $0.6 = \frac{6}{10} = \frac{3}{5}$

(b)  $2.5 = \frac{25}{10} = \frac{5}{2}$

(c)  $1.0 = \frac{10}{10} = 1$

(d)  $3.8 = \frac{38}{10} = \frac{19}{5}$

4. Write each of the following decimals in words:

(a) 0.03

(b) 1.20

(c) 108.56

(d) 10.07

(e) 0.032

(f) 5.008

**Answer:** (a) Zero point zero three

(b) One point two zero

(c) One hundred and eight point five six

(d) Ten point zero seven

(e) Zerointzerethreetwo

(f) Fivepointzerozero eight

### Chap -9

1. In a mathematic test the following marks were obtained by 40 students. Arrange these marks in a table using tally marks.

8, 1, 3, 7, 6, 5, 4, 4, 2, 4, 9, 5, 3, 7, 1, 6, 5, 2, 7, 7, 3, 8, 4, 2, 8, 9, 5, 8, 6, 7, 4, 5, 6, 9, 6, 4, 4, 6, 6

(a) Find how many students obtained marks equal to or more than 7?

(b) How many students obtained marks below 4?

**Answer:**

(a) Twelve students

(b) Eight students

2. Following is the choice of sweets of 30 students of Class VI.

Ladoo, Barfi, Ladoo, jalebi, Ladoo, Rashulla, Jalebi, Ladoo, Barfi, Rasgulla, Ladoo, Jalebi, Jalebi, Rashulla, 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.

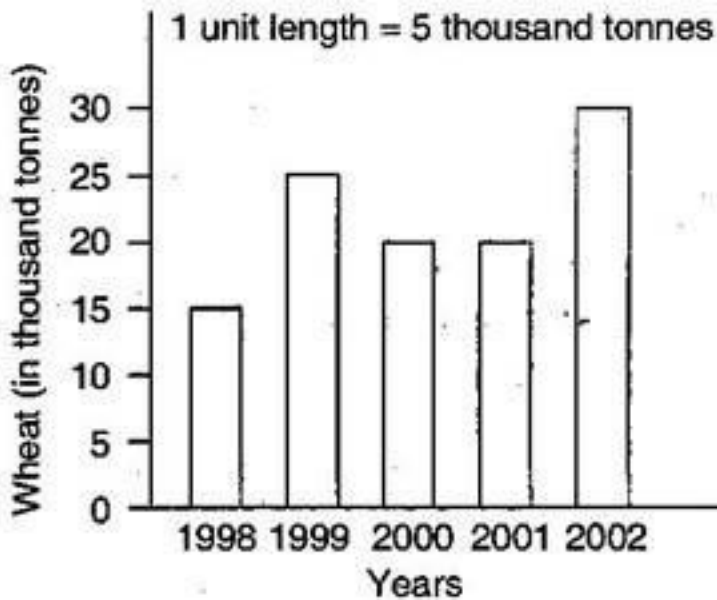
(b) Which sweet is preferred by most of the students?

**Answer:**

Sweets	TallyMarks	No. of students
ladoo	       	11
Barfi		3
Jalebi	 	7
		9

(b) Ladoo. Because 11 students prefer to eat.

3. The bar graph given below shows the amount of wheat purchased by government during the year 1998–2002.



Read the bar graph and write down your observations.

(a) In which year was the wheat production maximum?

(b) In which year was the wheat production minimum?

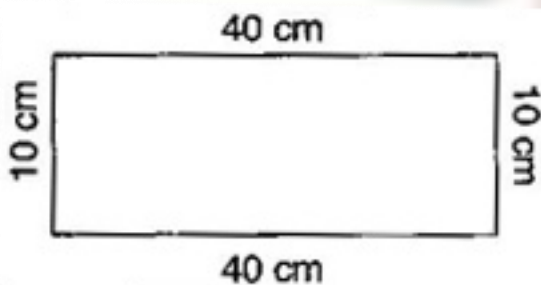
**Answer:** (a) In 2002, production of wheat was maximum.

(b) In 1998, production of wheat was minimum.

## Chap 10

1. The lid of a rectangular box of sides 40 cm by 10 cm is sealed all round with tape. What is the length of the tape required?

**Answer:** Total length of tape required = Perimeter of rectangle



$$= 2 (\text{length} + \text{breadth})$$

$$= 2 (40 + 10)$$

$$= 2 \times 50$$

$$= 100 \text{ cm} = 1 \text{ m}$$

Thus, the total length of tape required is 100 cm or 1 m.

**2. A table-top measures 2 m 25 cm by 1m 50cm. What is the perimeter of the table-top?**

**Answer:** Length of table top = 2m 25cm = 2.25m

Breadth of table top = 1m 50cm = 1.50m

$$\text{Perimeter of table top} = 2 \times (\text{length} + \text{breadth})$$

$$= 2 \times (2.25 + 1.50)$$

$$= 2 \times 3.75 = 7.50 \text{ m}$$

Thus, perimeter of table top is 7.5 m.

**3. What is the length of the wooden strip required to frame a photograph of length 32 cm and breadth 21 cm respectively?**

**Answer:** Length of wooden strip = Perimeter of photograph

$$\text{Perimeter of photograph} = 2 \times (\text{length} + \text{breadth})$$

$$= 2 (32 + 21)$$

$$= 2 \times 53 \text{ cm} = 106 \text{ cm}$$

Thus, the length of the wooden strip required is 106 cm.

**4. A rectangular piece of land measures 0.7 km by 0.5 km. Each side is to be fenced with 4 rows of wires. What is the length of the wire needed?**

**Answer:** Since the 4 rows of wires are needed. Therefore the total length of wires is equal to 4 times the perimeter of rectangle.

$$\text{Perimeter of rectangular piece of land} = 2 \times (\text{length} + \text{breadth})$$

$$= 2 \times (0.7 + 0.5) = 2 \times 1.2 = 2.4 \text{ km}$$

$$= 2.4 \times 1000 \text{ m} = 2400 \text{ m}$$

Thus, the length of wire = 4 x 2400 = 9600 m = 9.6 km

**5. Find the perimeter of a triangle with sides measuring 10 cm, 14 cm and 15 cm.**

**Answer:** Perimeter of triangle = Sum of all three sides



$$= 10 \text{ cm} + 14 \text{ cm} + 15 \text{ cm} = 39 \text{ cm}$$

Thus, perimeter of triangle is 39 cm.

**6. Find the perimeter of a regular hexagon with each side measuring 8 cm.**

**Answer:** Perimeter of Hexagon =  $6 \times$  length of one side

$$= 6 \times 8 \text{ m} = 48 \text{ m}$$

Thus, the perimeter of hexagon is 48 m.

## Chap 11

**1. Cadets are marching in a parade. There are 5 cadets in a row. What is the rule, which gives the number of cadets, given the number of rows? (Use  $n$  for the number of rows)**

**Answer:** Number of rows =  $n$

Cadets in each row = 5

Therefore, total number of cadets =  $5n$

**2. If there are 50 mangoes in a box, how will you write the total number of mangoes in terms of the number of boxes? (Use  $b$  for the number of boxes)**

**Answer:** Number of boxes =  $b$

Number of mangoes in each box = 50

Therefore, total number of mangoes =  $50b$

**3. The teacher distributes 5 pencils per student. Can you tell how many pencils are needed, given the number of students? (Use  $s$  for the number of students)**

**Answer:**

Number of students =  $s$

Number of pencils to each student = 5

Therefore, total number of pencils needed are =  $5s$

**4. A bird flies 1 kilometer in one minute. Can you express the distance covered by the bird in terms of its flying time in minutes? (Use  $t$  for flying time in minutes)**

**Answer:** Time taken by bird =  $t$  minutes  
Speed of bird = 1 km per minute

Therefore, Distance covered by bird = speed  $\times$  time =  $1 \text{ km} \times t = t$

5. Radha is drawing a dot Rangoli (a beautiful pattern of lines joining dots with chalk powder as in figure). She has 8 dots in a row. How many dots will her Rangoli have for  $r$  rows? How many dots are there if there are 8 rows? If there are 10 rows?



**Answer:** Number of dots in each row = 8 dots

Number of rows =  $r$

Therefore, total number of dots in  $r$  rows =  $8r$

When there are 8 rows, then number of dots =  $8 \times 8 = 64$  dots

When there are 10 rows, then number of dots =  $8 \times 10 = 80$  dots

6. Leela is Radha's younger sister. Leela is 4 years younger than Radha. Can you write Leela's age in terms of Radha's age? Take Radha's age to be  $x$  years.

**Answer:**

Radha's age =  $x$  years

Therefore, Leela's age =  $(x - 4)$  years

7. Mother has made laddus. She gives some laddus to guests and family members; still 5 laddus remain. If the number of laddus mother gave away is  $l$ , how many laddus did she make?

**Answer:** Number of laddus gave away =  $l$

Number of laddus remaining = 5

Total number of laddus she made = (1 +

## Chap 12

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

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

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

**Answer:** (a) The ratio of girls to that of boys =  $20/15 = \frac{4}{3} = 4 : 3$

(b) The ratio of girls to total students =  $20/35 = \frac{4}{7} = 4 : 7$

2. Out of 30 students in a class, 6 like football, 12 like cricket and remaining like tennis. Find the ratio of:

(a) The number of students liking football to the number of students liking tennis.

(b) The number of students liking cricket to the total number of students.

**Answer:** Total number of students = 30

Number of students like football = 6

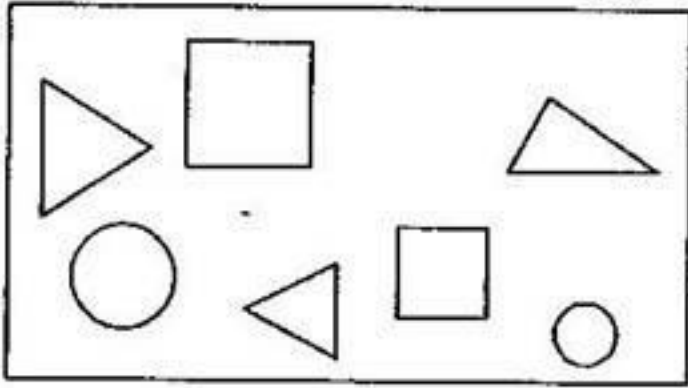
Number of students like cricket = 12

Thus number of students like tennis =  $30 - 6 - 12 = 12$

(a) The ratio of students like football that of tennis =  $6/12 = \frac{1}{2} = 1 : 2$

(b) The ratio of students like cricket to that of total students =  $12/30 = \frac{2}{5} = 2 : 5$

3. See the figure and find the ratio of



- (a) The number of triangles to the number of circles inside the rectangle.
- (b) The number of squares to all the figures inside the rectangle.
- (c) The number of circles to all the figures inside the rectangle.

**Answer:** (a) Ratio of number of triangles to that of circles =  $\frac{3}{2} = 3 : 2$

(b) Ratio of number of squares to all figures =  $\frac{2}{7} = 2 : 7$

(c) Ratio of number of circles to all figures =  $\frac{2}{7} = 2 : 7$

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

**Answer:** We know that, Speed =

Speed of Hamid = 9 km/h and Speed of Akhtar = 12 km/h

Ratio of speed of Hamid to that of speed of Akhtar = 3 : 4

**Solve: Each carry three marks**

### Chap 7

1. Ila read 25 pages of a book containing 100 pages. Lalita read  $\frac{2}{5}$  of the same book. Who read less?

**Answer:** Ila read 25 pages out of 100 pages.



Fraction of reading the pages =  $\frac{1}{4}$  =  $\frac{2}{5}$  part of book

Lalita read  $\frac{1}{4}$  part of book =  $\frac{2}{5}$  pages

$$\text{Since } \frac{1}{4} < \frac{2}{5}$$

Therefore, Ila read less.

2. Rafiq exercised for  $\frac{3}{6}$  of an hour, while Rohit exercised for  $\frac{3}{4}$  of an hour

. Who exercised for a longer time?

**Answer:** Rafiq exercised  $\frac{3}{6}$  of an hour.

Rohit exercised  $\frac{3}{4}$  of an hour.

$$\text{Since } \frac{3}{4} > \frac{3}{6}$$

Therefore, Rohit exercised for a longer time.

3. In a class A of 25 students, 20 passed in first class; in another class B of 30 students, 24 passed in first class. In which class was a greater fraction of students getting first class?

**Answer:** In class A, 20 passed out of 25, i.e.  $\frac{20}{25} = \frac{4}{5}$

In class B, 24 passed out of 30, i.e.  $\frac{24}{30} = \frac{4}{5}$

Hence, each class has the same fraction of students getting first class.

5. Solve:

(a)  $\frac{2}{3} + \frac{1}{7}$

(b)  $\frac{1}{2} + \frac{1}{3}$

(c)  $\frac{4}{9} + \frac{2}{7}$

$$(d) \frac{5}{7} + \frac{1}{3}$$

**Answer:** (a) L.C.M. of 3 and 7 is 21

$$\therefore \frac{2}{3} + \frac{1}{7} = \frac{2 \times 7 + 1 \times 3}{21} = \frac{14 + 3}{21} = \frac{17}{21}$$

**(b) L.C.M. of 10 and 15 is 30**

$$\therefore \frac{3 \times 3 + 7 \times 2}{30} = \frac{9 + 14}{30} = \frac{23}{30}$$

**(c) L.C.M. of 9 and 7 is 63**

$$\therefore \frac{4}{9} + \frac{2}{7} = \frac{4 \times 7 + 2 \times 9}{63} = \frac{28 + 18}{63} = \frac{46}{63}$$

**(d) L.C.M. of 7 and 3 is 21**

$$\therefore \frac{5}{7} + \frac{1}{3} = \frac{5 \times 3 + 1 \times 7}{21} = \frac{15 + 7}{21} = \frac{22}{21}$$

## Chap 8

1. Rashid spent Rs.35.75 for Maths book and Rs.32.60 for Science book. Find the total amount spent by Rashid.

**Answer:** Money spent for Maths book = Rs.35.75

Money spent for Science book = Rs.32.60

Total money spent = Rs.35.75 + Rs.32.60 = Rs.68.35  
Therefore, total money spent by Rashid is Rs.68.35

2. Radhika's mother gave her Rs.10.50 and her father gave her Rs.15.80. Find the total amount given to Radhika by her parents.

**Answer:** Money given by her mother = Rs.10.50

Money given by her father = Rs.15.80

Total money received by Radha = Rs.10.50 + Rs.15.80 = Rs.26.30

Therefore, total money received by Radha is Rs.26.30.

3. Express as meters using decimals:

(a) 15cm

(b) 6cm

(c) 2 m 45cm

(d) 9 m 7cm

(e) 419cm

**Answer:** (a)  $\therefore 1\text{cm} = \frac{1}{100}\text{m}$

$$\therefore 15\text{cm} = \frac{15}{100}\text{m} = 0.15\text{m}$$

(b)  $\therefore 1\text{cm} = \frac{1}{100}\text{m}$

$$\therefore 6\text{cm} = \frac{6}{100}\text{m} = 0.06\text{m}$$

(c)  $\therefore 1\text{cm} = \frac{1}{100}\text{m}$

$$\therefore 2\text{m}45\text{cm} = 2 + \frac{45}{100}\text{m} = 2.45\text{m}$$

(d)  $\therefore 1\text{cm} = \frac{1}{100}\text{m}$

$$\therefore 9\text{m}7\text{cm} = 9 + \frac{7}{100}\text{m} = 9.07\text{m}$$

(e)  $\therefore 1\text{cm} = \frac{1}{100}\text{m}$

$$\therefore 419\text{cm} = \frac{419}{100}\text{m} = 4.19\text{m}$$

4. Express as cm using decimals:

(a) 5mm

(b) 60mm

(c) 164mm

(d) 9 cm 8mm

(e) 93mm

**Answer:(a)** ∴ 1mm =  $\frac{1}{10}$  cm

∴ 5mm =  $\frac{5}{10}$  = 0.5cm

**(b)** ∴ 1mm =  $\frac{1}{10}$  cm

∴ 60mm =  $\frac{60}{10}$  = 6cm

**(c)** ∴ 1mm =  $\frac{1}{10}$  cm

∴ 164mm =  $\frac{164}{10}$  = 16.4cm

**(d)** ∴ 1mm =  $\frac{1}{10}$  cm

∴ 9cm 8mm = 9 +  $\frac{8}{10}$  = 9 + 0.8 = 9.8cm

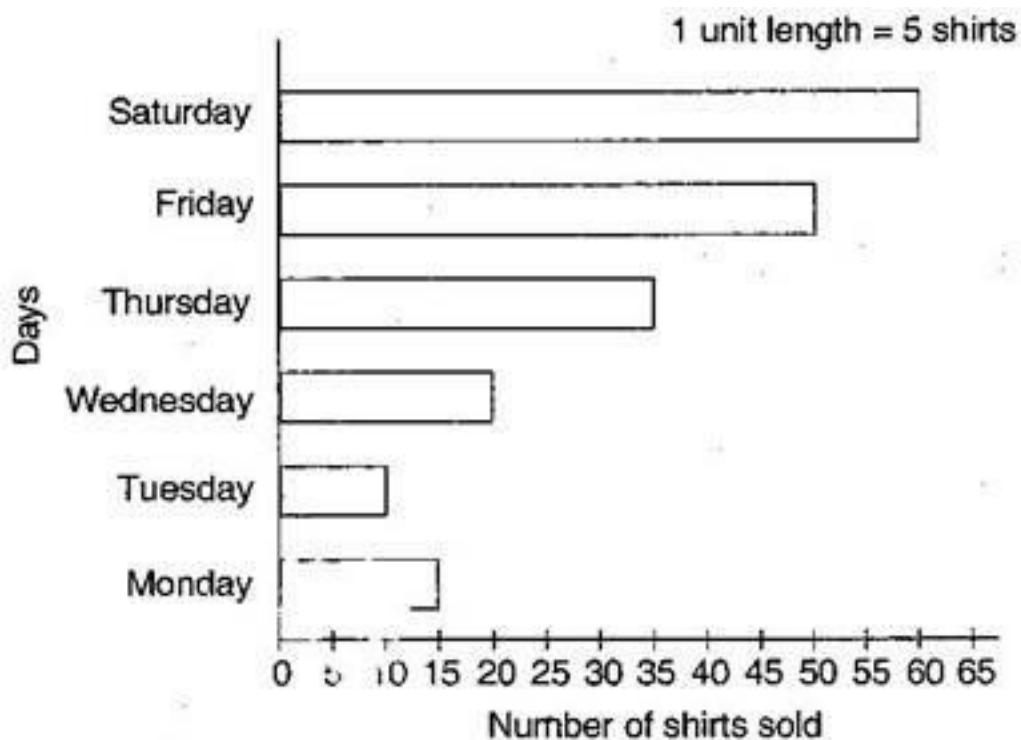
**(e)** ∴ 1mm =  $\frac{1}{10}$  cm

∴ 93mm =  $\frac{93}{10}$  = 9.3cm

## Chap 9

1. Observe this bar graph which shows the sale of shirts in a ready-made shop from Monday to Saturday.





Now answer the following questions:

- What information does the above bar graph give?
- What is the scale chosen on the horizontal line representing number of shirts?
- On which day were the maximum number of shirts sold? How many shirts were sold on that day?
- On which day were the minimum number of shirts sold?
- How many shirts were sold on Thursday?

**Answer:** (a) The bar graph shows the sale of shirts in a ready-made shop from Monday to Saturday.

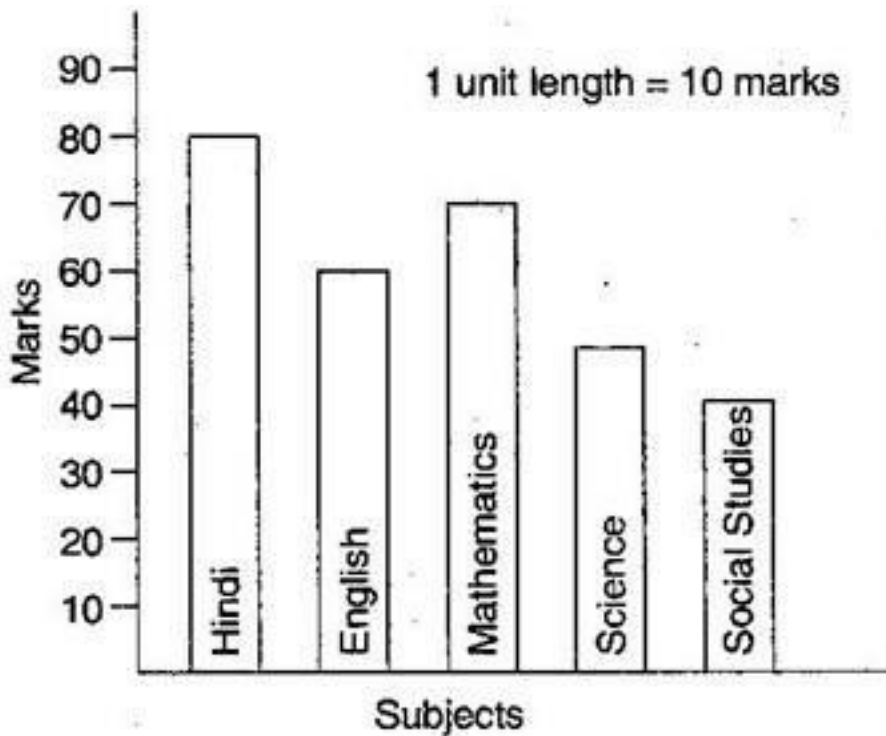
(b) 1 unit = 5 shirts

(c) On Saturday, maximum number of shirts, 60 shirts were sold.

(d) On Tuesday, minimum number of shirts were sold.

(e) On Thursday, 35 shirts were sold.

2. Observe this bar graph which shows the marks obtained by Aziz in half-yearly examination in different subjects:



Answer the given questions:

- What information does the bar graph give?
- Name the subject in which Aziz scored maximum marks.
- Name the subject in which he has scored minimum marks.
- State the name of the subjects and marks obtained in each of them

**Answer:** (a) The bar graph shows the marks obtained by Aziz in half yearly examination in different subjects.

(b) Hindi.

(c) Social Studies.

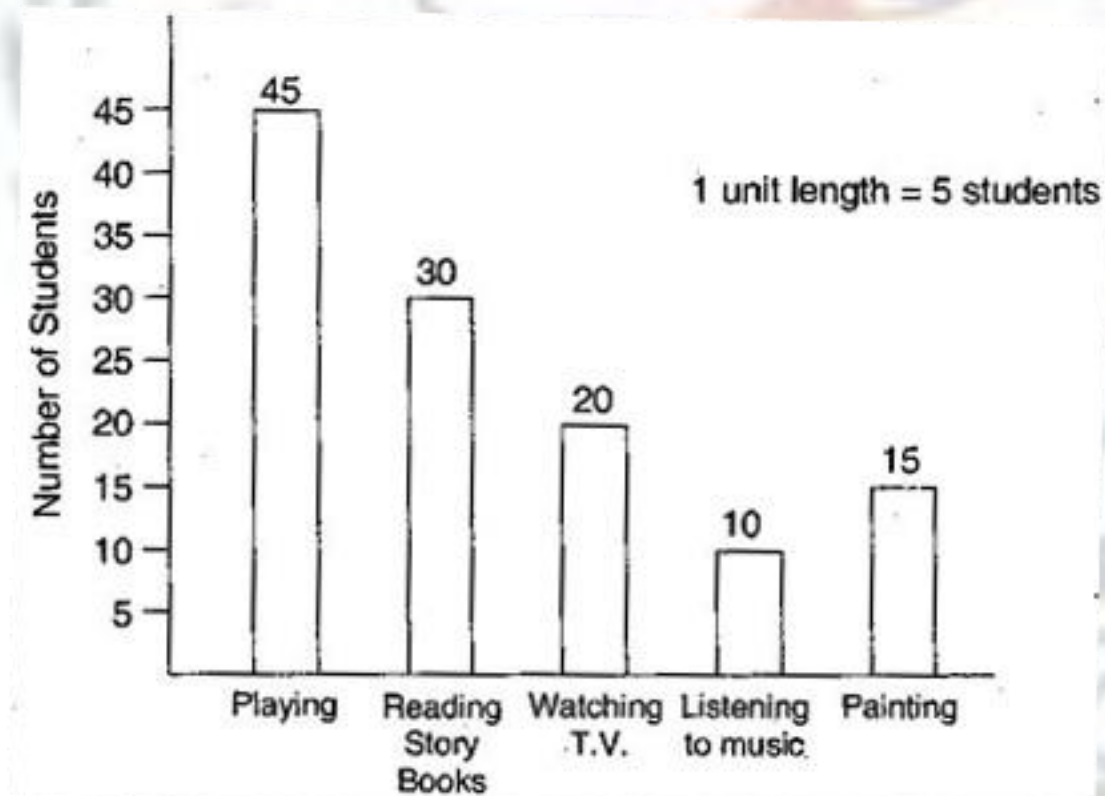
(d) Hindi 80, English 60, Mathematics 70, Science 50, Social Studies 40.

3. A survey of 120 school students was done to find which activity they prefer to do in their free time:

Preferred activity	Number of students
Playing	45
Reading story books	30
Watching TV	20
Listening to music	10
Painting	15

Draw a bar graph to illustrate the above data taking scale of 1 unit length = 5 students. Which activity is preferred by most of the students other than playing?

Answer:

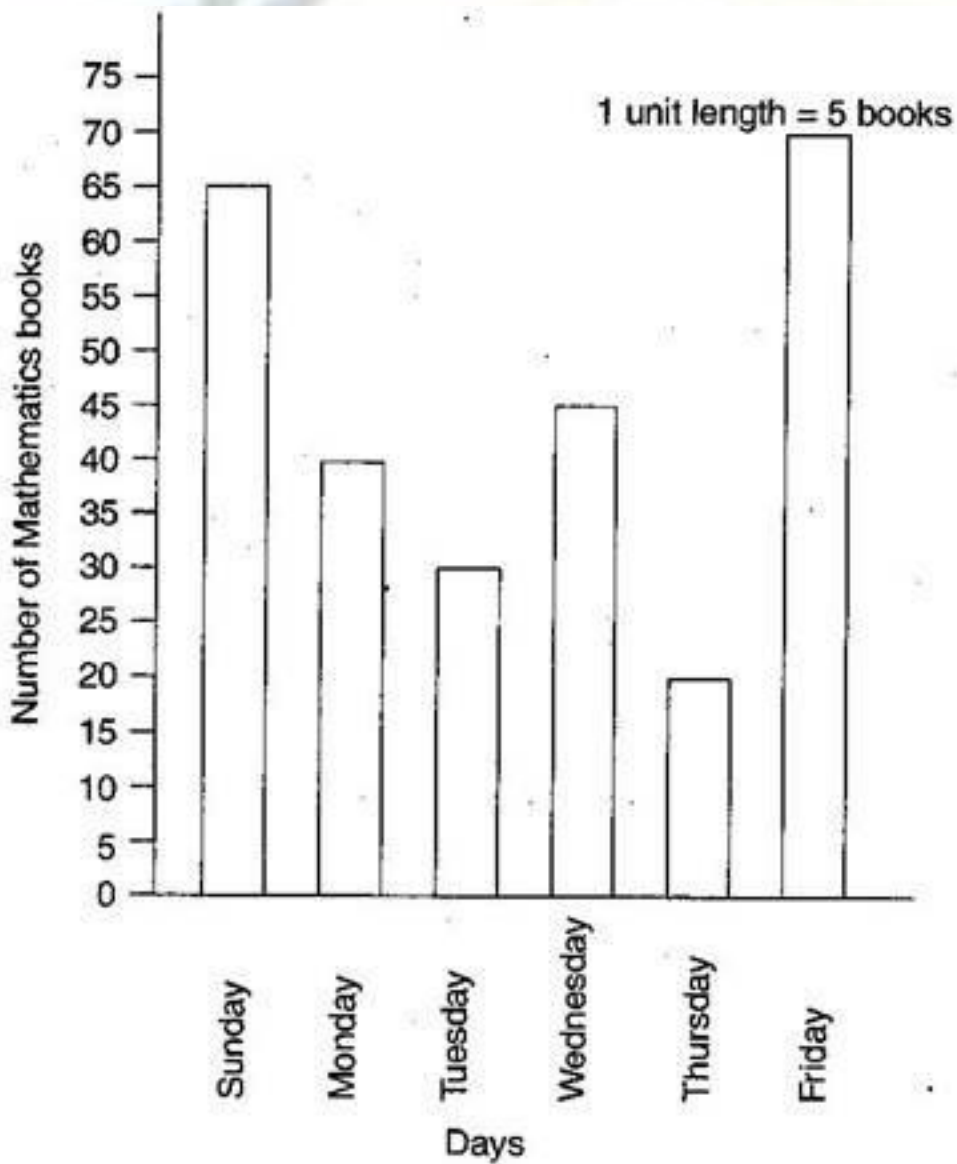


Ans: Reading Story Books is preferred by most of the students other than playing

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

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

Answer:





## Chap 10

1. Find the cost of fencing a rectangular park of length 175 m and breadth 125 m at the rate of Rs. 12 per meter.

**Answer:** Length of rectangular park = 175 m

Breadth of rectangular park = 125 m

Perimeter of park =  $2 \times (\text{length} + \text{breadth})$

$$= 2 \times (175 + 125)$$

$$= 2 \times 300 = 600 \text{ m}$$

Since, cost of fencing park per meter = Rs. 12

Therefore, cost of fencing park of 600 m =  $12 \times 600 = \text{Rs. } 7,200$

2. Sweety runs around a square park of side 75 m. Bulbul runs around a rectangular park with length of 60 m and breadth 45 m. Whocovers less distance?

**Answer:** Distance covered by Sweety = Perimeter of square park

Perimeter of square =  $4 \times \text{side}$

$$= 4 \times 75 = 300 \text{ m}$$

Thus, distance covered by Sweety is 300 m.

Now, distance covered by Bulbul = Perimeter of rectangular park

Perimeter of rectangular park =  $2 \times (\text{length} + \text{breadth})$

$$= 2 \times (60 + 45)$$

$$= 2 \times 105 = 210 \text{ m}$$

Thus, Bulbul covers the distance of 210 m. So,

Bulbul covers less distance.

3. The area of a rectangular garden 50 m long is  $300 \text{ m}^2$ , find the width of the garden.

**Answer:** Length of rectangle = 50 m and Area of rectangle =  $300 \text{ m}^2$

Since, Area of rectangle = length  $\times$  breadth

Therefore, Breadth =  $\frac{\text{Area}}{\text{Length}} = \frac{300}{50} = 6 \text{ m}$

Thus, the breadth of the garden is 6m.

**4. What is the cost of tiling a rectangular plot of land 500m long and 200m wide at the rate of Rs. 8 per hundred sq. m?**

**Answer:** Length of land = 500m and Breadth of land = 200m

Area of land = length  $\times$  breadth = 500m  $\times$  200m = 1,00,000m<sup>2</sup>

$\therefore$  Cost of tiling 100 sq. m of land = Rs. 8

$\therefore$  Cost of tiling 1,00,000sq. m of land =  $\frac{8}{100} \times 100000 = \text{Rs.}8000$

### Chap 11

1. Identify the operations (addition, subtraction, division, multiplication) in forming the following expressions and tell how the expressions have been formed:

(a)  $z + 1$ ,  $z - 1$ ,  $y + 17$ ,  $y - 17$

(b)  $17y$ ,  $5z$

(c)  $2y + 17$ ,  $2y - 17$

(d)  $7m$ ,  $3n$ ,  $3$ ,  $4$

Answer ; (a)  $z + 1$  Addition

$z - 1$  Subtraction

$y + 17$  Addition

$y - 17$  Subtraction

(b)  $17y$  Multiplication

$y/17$  Division

**5z Multiplication**

**(c)  $2y + 17$  Multiplication and Addition**

**$2y - 17$  Multiplication and Subtraction**

**(d)  $7m$  Multiplication**

**$7m + 3$  Multiplication and Addition**

**$7m - 3$  Multiplication and Subtraction**

2. Give expressions for the following cases:

**(a) 7 added to  $p$ .**

**(b) 7 subtracted from  $p$ .**

**(c)  $p$  multiplied by 7.**

**(d)  $p$  divided by 7.**

**(e) 7 subtracted from**

**(f)  $p$  multiplied by 5.**

**(g)  $p$  divided by 5.**

**(h)  $p$  multiplied by**

**Answer:**

**(a)  $p + 7$**

**(b)  $p - 7$**

**(c)  $7p$**

(d)

(e)  $-7$

(f)

(g)  $\frac{-p}{5}$

(h)

**3. Give expression in the following cases:**

(a) 11 added to  $2m$ .

(b) 11 subtracted from  $2m$ .

(c) 5 times  $y$  to which 3 is added.

(d) 5 times  $y$  from which 3 is subtracted.

(e)  $y$  is multiplied by

(f)  $y$  is multiplied by and then 5 is added to the result.

(g)  $y$  is multiplied by 5 and result is subtracted from 16.

(h)  $y$  is multiplied by and the result is added to 16.

**Answer:**

(a)  $2m+11$

(b)  $2m-11$

(c)  $5y+3$



(d)  $5y^3$

(e)

(f)  $+5$

(g)  $165y$

(h)  $+16$

4. (a) Form expressions using  $t$  and 4. Use not more than one number operation. Every expression must have  $t$  init.

(b) Form expressions using  $y$ , 2 and 7. Every expression must have  $y$  init. Use only two number operations. These should be different.

**Answer:**

(a)  $t + 4, t - 4, 4t, t/4$

(b)  $2y + 7, 2y - 7, 7y + 2, 7y - 2$  and soon

## Chap 12

1. In a year, Seema earns Rs. 1,50,000 and saves Rs. 50,000. Find the ratio of:

(a) Money that Seema earns to the money she saves.

(b) Money that she saves to the money she spends.

**Answer:** Total earning = Rs. 1,50,000 and Saving = Rs. 50,000

$\therefore$  Money spent = Rs. 1,50,000 - Rs. 50,000 = Rs. 1,00,000

(a) Ratio of money earned to money saved =  $\frac{1,50,000}{50,000} = \frac{50,000 \times 3}{1 \times 50,000} = 3:1$

(b) Ratio of money saved to money spent =  $\frac{50,000}{1,00,000} = \frac{50,000 \times 1}{50,000 \times 2} = 1:2$

2. In a college out of 4320 students, 2300 are girls. Find the ratio of:

(a) The number of girls to the total number of students.

(b) The number of boys to the number of girls.

(c) The number of boys to the total number of students.

**Answer:**

Total number of students in school = 4320

Number of girls = 2300

Therefore, number of boys =  $4320 - 2300 = 2020$

(a) Ratio of girls to total number of students =  $\frac{2300}{4320} = \frac{115 \times 20}{216 \times 20} = 115:216$

(b) Ratio of boys to that of girls =  $\frac{2020}{2300} = \frac{101 \times 20}{115 \times 20} = 101:115$

(c) Ratio of boys to total number of students =  $\frac{2020}{4320} = \frac{101 \times 20}{216 \times 20} = 101:216$

3. Out of 1800 students in a school, 750 opted basketball, 800 opted cricket and remaining opted table tennis. If a student can opt only one game, find the ratio of:

(a) The number of students who opted basketball to the number of students who opted table tennis.

(b) The number of students who opted cricket to the number of students opting basketball.

(c) The number of students who opted basketball to the total number of students.

**Answer:** Total number of students = 1800

Number of students opted basketball = 750

Number of students opted cricket = 800

Therefore, number of students opted tennis =  $1800 - (750 + 800) = 250$

(a) Ratio of students opted basketball to that of opted table tennis =  $\frac{750}{250} = \frac{3 \times 250}{1 \times 250} = 3:1$

(b) Ratio of students opted cricket to students opted basketball =  $\frac{800}{750} = \frac{50 \times 16}{50 \times 15} = 16:15$

(c) Ratio of students opted basketball to total no. of students =  $\frac{750}{1800} = \frac{5 \times 150}{150 \times 12} = 5:12$

4. The 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.

**Answer:** Cost of a dozen pens (12 pens) = Rs. 180

∴ Cost of 1 pen = Rs. 15

Cost of 8 ball pens = Rs. 56

∴ Cost of 1 ball pen = Rs. 7

Ratio of cost of one pen to that of one ball pen = 15:7



## PAPER FORMATE

### SECTION - A

(i) Choose correct option [1 x 10 = 10]

(ii) Fill the blank [1 x 10 = 10]

(iii) Tell whether the statement is true or false: [1 X 10 = 10]

(IV) Solve: Each carry one marks [1X 10 = 10]

### SECTION - B

Solve: Each carry two marks (Any four) [2 X 8 = 16]

### SECTION - C

Solve: Each carry three marks (Any one) [3 X 8 = 24]