Exercise-29

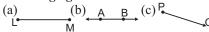
1. How many line segments are in each of the following figures:



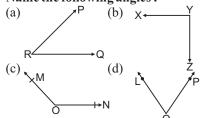
- **Ans.** (a) 4 (b) 5 (c) 7 (d) 3
 - 2. Draw as many line segments as you can with end points at the four given point A, B, C, or D.



3. Write the names for each of the following figures:



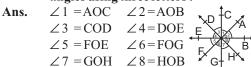
- **Ans.** (a) Line segment \overline{LM}
 - (b) Stragint line AB
 - (c) Ray PQ
 - 4. Which among ray, straight line and line segment has one end point?
- Ans. ray
 - 5. Find the similarity between ray and straight line.
- **Ans.** No fixed length.
 - 6. Name the following angles:



- **Ans.** (a) $\angle PQR \text{ or } \angle QRP$
 - (b) $\angle XYZ$ or $\angle ZYX$
 - (c) \angle MON or \angle NOM
 - (d) $\angle LQP \text{ or } \angle PQL$
 - 7. Look at the given figure:
- **Ans.** (a) MP, PN (b) P (c) ∠MPN
 - 8. Label the points and name the following angles:

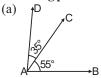
 (a) B (b) R (c) G (d)

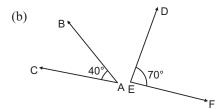
- Ans. Vertex B S F Y
 Arms AB, BC RS, ST EF, FG XY, YZ
 Angle ∠ABC ∠RST ∠EFG ∠XYZ
- 9. In the figure name the following angles using three letters:

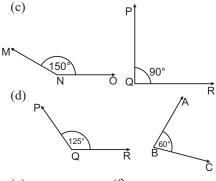


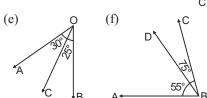
Exercise-30

1. Which angle is smaller in each of the following pairs of angles:

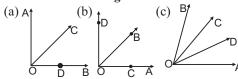




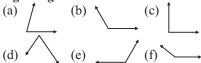




Ans. $(a) \angle CAD$ $(b) \angle BAC$ $(c) \angle PQR$ $(d) \angle ABC$ $(e) \angle BOC$ $(f) \angle DBC$ 2. In each of the figures given below, write which of the two-ZAOB and \angle COD has the greater measure:



- (a) $\angle AOB = 90^{\circ}; \angle COD = 45^{\circ};$ Ans.
 - ∴ ∠AOB is greater.
 - (b) $\angle AOB = 45^{\circ}$; $\angle COD = 90^{\circ}$;
 - ∴ ∠AOB is greater.
 - (c) $\angle AOB = 73^{\circ}$; $\angle COD = 28^{\circ}$;
 - ∴ ∠AOB is greater.
 - 3. Measure the following angles with the help of a protractor and write whether the angle is acute, obtuse or right angle:



- Ans. (a) 75°; acute
- (b) 120°; obtuse
- (c) 90°; right
- (d) 70°; acute
- (e) 120°; abtuse (f) 140°; abtuse
- Draw angles of the following 4. measures by using a protractor:
 - (a) 50°
- (b) 90°
- (c) 45° (e) 160°
- (d) 130°
- Ans. (a)
- (b) 90° (d) 130°



- 5. Fill in the blanks:
- Ans. (a) The measure of a right angle = 90° .
 - (b) The measure of a straight angle $=180^{\circ}$.
 - (c) The measure of a complete angle $=360^{\circ}$.
 - (d) An angle, whose measure is less than 90° is called an acute angle.
 - (e) Two angles, the sum of whose measures is a right angle, are called complementry angle.

- An angle whose measure is greater than 90° but less than 180° is called an **obtuse** angle.
- 6. Measure of some angles are given below. separate them as the acute angles, obtuse angles and right angles:
- Ans. (a) acute angle (b) acute angle
 - obtuse angle (d) obtuse angle (c)
 - (f) obtuse angle right angle
 - 7. Write the complementary angle of each of the following angles:
- Ans. (a) 35°
 - \Rightarrow $90^{\circ} - 35^{\circ} = 55^{\circ}$
 - complementry angle = 55°
 - (b) 55°
 - $90^{\circ} 55^{\circ} = 35^{\circ}$ \Rightarrow
 - ∴. complementry angle = 35°
 - 87° (c)
 - $90^{\circ} 87^{\circ} = 3^{\circ}$ \Rightarrow
 - complementry angle = 3°
 - (d) 60°
 - $90^{\circ} 60^{\circ} = 30^{\circ}$ \Rightarrow
 - complementry angle = 30°
 - 70° (e)
 - $90^{\circ} 55^{\circ} = 30^{\circ}$ \Rightarrow
 - complementry angle = 20°
 - 8. Write the supplementary angle of each of the following angles:
 - (a) 28°
 - $180^{\circ} 28^{\circ} = 152^{\circ}$ \Rightarrow
 - Supplementry angle
 - 75° (b)
 - $180^{\circ} 75^{\circ} = 105^{\circ}$ \Rightarrow
 - Supplementry angle = 105° ∴.
 - (c)
 - $180^{\circ} 90^{\circ} = 90^{\circ}$ \Rightarrow
 - Supplementary angle
 - (d) 160°
 - $180^{\circ} 160^{\circ} = 20^{\circ}$
 - Supplementary angle = 20°
 - 120° (e)
 - $180^{\circ} 120^{\circ} = 60^{\circ}$ \Rightarrow
 - Supplementary angle = 60°
 - (f) 130°
 - $180^{\circ} 130^{\circ} = 50^{\circ}$
 - Supplementary angle = 50°
 - 9. Which pair of complementary angles are equal to each other in measure?
- 45° [: 45+45=90]Ans.
- Which pair of supplementary angles 10. are equal to each other is measures?
- [:: 90 + 90 = 180]Ans. 90°

- 11. Look at the given figure:
- Ans. Point Q is in the interior part of the angle XOY.
 - (b) Point M is in the exterior part of the angle XOY.
 - (c) Point N is in the exterior part of the angle XOY.

(b)

12. In which of the following two figures are \(\angle XOY \) and \(\angle XOZ \) adjacent

Ans.



 $\angle XOZ = 45^{\circ}$





adjacent

(a)

- adjacent
- (c)



- $\angle XOY = 45^{\circ}$ $\angle XOZ = 45^{\circ}$
- $\angle XOY = 40^{\circ}$ $\angle XOZ = 40^{\circ}$
- adjacent
- adjacent

Worksheet

1. Measure the following angles and write their names too:

Ans. 125°; Obtuse 50°; Acute 90°; Right





- 2. Look at the diagram below. Find as many angles as you can:
- Do it yourself. Ans.

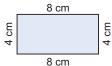
Perimeter

Exercise-31

11

Find the perimeter of each of the following figures:

(a)



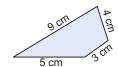
Perimeter = Sum of all sides = 8 cm + 8 cm + 4 cm + 4 cm $=24 \,\mathrm{cm}$

(b)



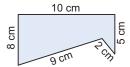
Perimeter = Sum of all side =6cm+8cm+10cm=24

(c)



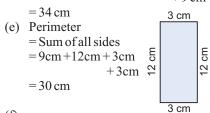
Perimeter = sum of all sides =9cm+4cm+19cm $=21 \,\mathrm{cm}$

(d)

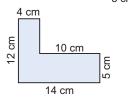


Perimeter = Sum of all sides =5cm+10cm+5cm+2cm

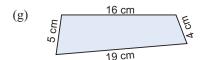
 $+9 \,\mathrm{cm}$



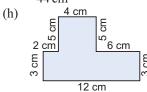
(f)



Perimeter = Sum of all sides = 12 cm + 4cm + 10cm + 5cm+14cm $=45 \, \mathrm{cm}$



Perimeter = Sum of all sides = 5cm + 16cm + 4cm + 19cm = 44 cm



Perimeter = Sum of all sides = 3cm + 2cm + 5cm + 4cm + 5cm + 6cm + 3cm + 12cm = 40 cm

2. Find the perimeter of triangle whose sides are:

Ans. (a) 14 m, 10 m, 8 m= 14 m + 10 + m + 8 m = 32 m

> (b) 7 cm, 8 cm, 12 cm= 7 cm + 8 cm + 12 cm = 27 cm

(c) 18 m, 15 m, 13 m= 18 m + 15 m + 13 m = 46 m

(d) 1 m, 70 cm, 2 m 6 cm, 4 m= 100 cm h + 7 cm + 206 cm

+400cm

$=776 \,\mathrm{cm}$

Ans.

3. Find the perimeter of the equilateral triangle in which each side is:

(a) 6 cm
Perimeter of an equilateral triangle
= side + side + side

= 6 cm + 6 cm + 6 cm = 18 cm(b) 12 cm

= 12 cm + 12 cm + 12 cm = 36 cm(c) 9 cm

=9 cm + 9 cm + 9 cm = 27 cm(d) 2 m 6 cm

= 2cm + 6cm + 2cm + 6cm + 2cm 6cm

= 2m 6cm + 2m 6cm + 6cm + 6cm= 6m 18cm

(e) 12 m 1 cm = 12m 1 cm + 12m 1 cm + 12m 1 cm = 12m + 12m + 12m 1 cm + 1 cm + 1 cm

(f) 10 m= 10 m + 10 m + 10 m = 30 m (g) 15 cm = 15 cm + 15 cm + 15 cm = 45 cm (h) 1 m 12 cm = 1 m 12 cm + 1 m 12 m + 1 cm 12 cm = 1 m + 1 m + 1 m 12 cm 12 cm + 12 cm = 3 m 36 cm

4. Find the perimeter of the rectangle whose:

Ans. (a) L=12 cm, B=17 cm $\therefore P=2 (L+B)$ = 2 (12 cm + 17 cm) $= 2 \times 29 \text{ cm}$ = 58 cm(b) B=25 cm, L=20 cm

: P = 2 (L+B)= 2 (25cm+20cm) = 2 × 45 m = 90 m

(c) L=30 cm, B=13 cm∴ P = 2(L+B)
= 2(30cm+13 cm)
= 2 × 43 cm
= 86 cm

(d) L=29 m, B=19 m $\therefore P=2 (L+B)$ =2 (29m+19m) $=2 \times 48 \text{ m}$ =96 m

5. Find the perimeter of the square in which each side is:

Ans. (a) 8 cmPerimeter = $4 \times \text{side}$ = $4 \times 8 \text{ cm} = 32 \text{ cm}$

(b) 15 cmPerimeter = $4 \times S$ = $4 \times 25 \text{ cm} = 60 \text{ cm}$

(c) 25 cmPerimeter = $4 \times S$ = $4 \times 25 \text{ cm}$ = 100 cm

(d) 32 cmPerimeter = $4 \times S$ = $4 \times 32 \text{ cm}$ = 128 cm

(e) 16 m 25 cmPerimeter = $4 \times \text{S}$ = $4 \times 16 \text{ m } 25 \text{ cm}$ = $4 \times 16.25 \text{ m}$ = 65 m

- 6. Vishal wants to fix the border of a quilt which is 2 m 50 cm, long and 1 m 30 cm broad. Find the length of the border.
- **Sol.** Here, length of the quilt

= 2m 50cm = 2.50m

breadth of the quilt

= 1 m 30 cm = 1.30 m

- : Length of the border
 - = Perimeter of the quilt
 - P = 2(L+B)
 - = 2 (2.50m + 1.30m)
 - $=2\times3.80$ m
 - = 7.60 m = 7 m 60 cm
- 7. Find the cost of fencing a square park of side 150 m at the rate of ₹ 6 per metre.
- **Sol.** To find the total cost first we would find out the perimeter of the park Now side of the park = 150 m
 - \therefore Perimeter = 4 × Side

 $=4 \times 150 \,\mathrm{m} = 600 \,\mathrm{m}$

Cost of fencing = ₹6 per meter

 $= ₹6 \times 600 \text{ m} = ₹3600$

- ∴ The cost of fencing = ₹3600
- 8. The length and breadth of a rectangular field are 125 metres and 95 metres respectively. Find the length of the wire needed to fence all around the garden four times.
- Sol. Here, length of the field = 125 mbreadth of the field = 95 m
 - \therefore Perimeter = 2 × (L+B)

 $=2\times(125\,\mathrm{m}+95\mathrm{m})$

 $= 2 \times 220 \,\mathrm{m} = 440 \,\mathrm{m}$

- :. Length of the wire needed = 4×440 m = 1760 m.
- 9. Fill in the blanks:
- Ans. (a) A closed curve which does not intersect itself is called **Simple closed curve**.
 - (b) The **Distance** around a figure is called the perimeter of the figure.
 - (c) The perimeter of a rectangle is 2 × (length + breadth).
 - (d) The perimeter of a square is $4 \times$ **Length of one side**.
 - (e) The perimeter of a figure made of line segments is the **Sum** of the lengths of the line segments.
- 10. Aditi goes 3 times around a field, the length of which is 320 m and the

breadth is 210 m., find the distance covered by her.

Sol. Distance covered by Aditi

= 3 times the perimeter of the field

Here, $length = 320 \, m$

and breadth = $210 \,\mathrm{m}$

 $P = 2 \times (L + B)$

 $= 2 \times (320 \,\mathrm{m} + 210 \,\mathrm{m})$

 $= 2 \times 530 \,\mathrm{m} = 1060 \,\mathrm{m}$

.. Total distance covered

 $= 3 \times 1060 \,\mathrm{m} = 3180 \,\mathrm{m}$

- 11. The sides of a square is twice as long as the side of another square. How many times is the perimeter of the first square than the perimeter of the second square?
- Sol. Let the side of the first square be x So, the side of the second square = $\frac{x}{2}$ Now perimeter of the first square

 $=4\times x=4x$

and perimeter of second square

 $=42\times\frac{x}{2}$

- The perimeter of the first square is two times the perimeter of the second square.
- 12. A park with sides
 20 m, 30 m, 60 m,
 15 m, 15 m and 12
 m is to be fenced. If
 the cost of fencing is ₹ 4 a metre,
 what is the cost of fencing?
- Sol. Sides of the park

 $= 20 \,\mathrm{m}, 30 \,\mathrm{m}, 60 \,\mathrm{m}, 15 \,\mathrm{m}, 12 \,\mathrm{m}$

∵ Perimeter = Sum of all sides

=20 m + 30 m + 60 m + 15 m + 12 m

Cost =₹4 a metre

=₹4×152=₹608.

- : Cost of fencing = ₹ 608.
- 13. A girl runs a race of 400 m around a rectangular field, the length of which is 30 m and the breadth is 20 m. How many times does the girl run around the field?
- **Sol.** Here, $L = 30 \,\text{m}$, $B = 20 \,\text{m}$

 $P = 2 \times (L+B)$

 $=2\times(30\text{m}\times20\text{m})$

 $= 2 \times 50 \,\mathrm{m} = 100 \,\mathrm{m}$

- \because Total length covered by the girl = 400 m
- $\therefore \text{ Leps run} = \frac{400 \text{ m}}{100 \text{ m}} = 4$
- .. The girl run 4 times around the field.

14. Diksha runs around a square field, each side of which is 15 m



long. Kirti runs around a rectangular field, the length of which is 18 m and the breadth is 12 m., find the distance covered by them.

Sol. Diksha:

Side of the Square $= 15 \, \text{m}$

 \therefore Perimeter = 4 × side

$$=4 \times 15 = 60 \,\mathrm{m}$$

Kirti:

Length of the rectangle = 18 mBreadth of the rectangle = 12 m

- Perimeter = $2 \times (L+B)$ = $2 \times (18 \text{ m} + 12 \text{ m})$ = 2×30 = 60 m
- 15. A triangle has a perimeter of 50 cm. If its two sides are of lengths 15 cm and 19 cm., find the length of its third side.
- Sol. Here perimeter = 50 cm Two sides = 15 cm and 19 cm
 - : Perimeter

- = Sum of all the three sides
- ∵ 3rd side
 - = Perimeter Sum of the two sides
 - =50 cm (15 cm + 19 cm)
 - =50 cm 34 cm = 16 cm
- \therefore Length of third side = 16 cm Ans
- 16. A square has a perimeter of 48 cm., find the length of its side.
- Sol. Here perimeter = 48 cmWe know that Perimeter = $4 \times \text{side}$

$$\Rightarrow \text{ Side } = \frac{\text{Perimeter}}{4}$$
$$= \frac{48 \text{ cm}}{4} = 12 \text{ cm}$$

- 17. A rectangle has a perimeter of 76 cm. If its length is 28 cm find its breadth.
- Sol. Here Perimeter = 76 cm, length = 28 cm and breadth = ? Let the breadth be x
 - \therefore Perimeter = 2 × (Length + Breadth)

$$\Rightarrow 76 = 2 \times (28 \,\mathrm{cm} + x)$$

$$\Rightarrow$$
 76 = 56 cm + $\frac{x}{2}$

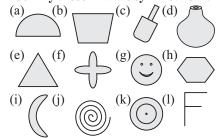
$$\Rightarrow \qquad x = \frac{76 - 56}{2} \text{ cm} = \frac{20 \text{ cm}}{2} \text{ cm}$$

12

Symmetry

Exercise-32

1. Look at the following shapes. Identify those that are symmetrical:

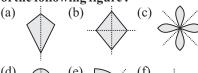


- **Ans.** (a), (b), (c), (d), (e), (f), (g), (h), (i), (k)
 - 2. Among the letters below choose the ones that are symmetrical:
 - (a) A (b) S (c)
 - (c) **7** (d) \
 - (e) J (f) Q (g) C (h) Y
 - (i) M(j) W (k) O (l) K

- **Ans.** (a), (b), (c), (d), (g), (h), (i), (j), (k)
 - 3. (a) What is the number of lines of symmetry in a square? four
 - (b) Can a circle have four or more lines of symmetry? yes
 - (c) How many lines of symmetry are there in an equilateral triangle?

three

- (d) What is the number of lines of symmetry in a rectangle? **four**
- (e) How many lines of symmetry **are** there in an isosceles triangle? **one**
- 4. Draw the axis of symmetry for each of the following figure:
- Ans.









Worksheet

1. Does the figure of star given below has a line of symmetry?

Ans. No

2. How many lines symmetry does the figure have?

Ans. 1

3. How many lines of symmetry does a pentagon have?

Ans. 1

4. Does the following figure has a line of symmetry?

Ans. No

5. Does the figure has a line of symmetry?

Ans. Yes

6. How many lines of symmetry does the figure have?

Ans. 1

7. Does the figure has a line of symmetry?

Ans. Yes

8. How many lines of symmetry does the figure have?

Ans.

9. How many lines of symmetry does the figure have?

Ans. None

10. How many lines of symmetry does the figure have?

Ans. Infinite

11. How many lines of symmetry does the figure have?

Ans. None

12. Does the figure has a line of symmetry?

Ans. Yes

13

Exercise-33 (c) One lorry ca

1. Fill in the blanks:

Ans. (a) If the price of 1 pen is ₹ 10 then the price of 5 pens is ₹ 50

(b) If one can contains 48 l of oil then 4 cans contain 192 L

(c) If the weight of 1 mango is 200 g then the weight of 4 mangoes is **800 g**

(d) If 1 shirt needs 3 m of cloth then 12 such shirts will need **36 m** of cloth.

(e) If a bus can go 100 km in 1 hour then the bus can go **500 km** in 5 hours.

2. (a) If the price of a doll is ₹ 8, what is the price of a dozen dolls?

Ans. \therefore Price of a doll = $\frac{3}{8}$ Total Number of dolls = 1 dozen = 12

∴ Price of a dozen dolls 8 × 12 = ₹96

(b) If one man drinks 400 ml of milk in a day, how much will 5 men drink in a day?

Ans. \therefore Milk drink by 1 man = 400 ml

 $\therefore \text{ Milk drink by 5 men} = 5 \times 400$

 $= 2000 \,\mathrm{m}l$

Unitary Method

(c) One lorry can carry 50 bags of rice. How many bags of rice can half a dozen lorries carry?

Ans. ∴ Number of bags carried by one lorry=50

.. Number of bags carried by half a dozen lorries = 50 × 6 = 300 bags.

(d) If one book has 70 pages, how many pages are there in 20 such books?

Ans. \therefore Numebr of pages in one book = 70

.. Number of pages in 20 books

 $= 70 \times 20$ = 1400 pages.

(e) If a train covers a distance of 56 km in 1 hour, how much distance will it cover in 8 hours?

Ans. : Distance covered by the train in 1 hour = 56 km

∴ Distance covered the train in 8 hours = 56 × 8

 $=448 \, \text{km}.$

3. Fill in the blanks:

Ans. (a) If the price of a pair of shirt is ₹48, than the price of one shirt is ₹24.

(b) If 5 bundles of sugarcane cost ₹ 130 then the cost of 1 bundle is ₹26.

- (c) If a car covers a distance of 175 km in 5 hours then the car will cover 35 km distance in 1 hour.
- (d) A hostel used 140 *l* of milk in 70 days then the milk used in one day is 2 *l*.
- 4. (a) The cost of 5 litres milk is ₹ 45.75. What is the cost of 1 litre milk?
- **Ans.** ∴ Cost of 5 litres milk=₹45.75
 - ∴ Cost of 1 litre milk = ₹ 45.75 ÷ 5 = ₹ 9.15
 - (b) The cost of 10 g of gold is ₹ 20000. What is the cost of 1 g gold?
- Ans. \therefore Cost of 10 g of gold = 20000
 - $\therefore \quad \text{Cost of 1 g of gold} = 20000 \div 10 \\ = \cancel{?} 2000$
 - (c) A car covers 2025 km in 25 hours. Find the distance covered by the car in one hour.
- Ans. : Distance covered in 25 hours = 2025 km
 - $\therefore \text{ Distance covered in 1 hour} = 2025 \div 25 = 81 \text{ km}$
 - (d) The cost of one dozen of cricket bat is ₹ 6000, what is the cost of one bat?
- **Ans.** ∴ Cost of one dozen bats = ₹6000
 - $\therefore \quad \text{Cost of one bat} = 6000 \div 12 \\ = ₹ 500$

Execise-34

- 1. The cost of 1 kg of each of these things is given:
- **Ans.** (a) $35 \times 4 = 140$ (b) $18 \times 3 = 54$
 - (c) $22 \times 5 = 110$ (d) $8 \times 6 = 48$
 - (e) $20 \times 5 = 100$ (f) $10 \times 6 = 60$
 - (g) $15 \times 3 = 45$ (h) $7 \times 2 = 14$
- 2. If 6 chocolate cost ₹ 42.60, what will be the cost of 9 such chocolates?
- **Sol.** The cost of 1 chocolate
 - = (the cost of 6 chocolates) \div 6 = ₹ 42.60 \div 6 = ₹ 7.10
 - :. The cost of 9 chocolates
 - = $(\cos t \text{ of 1 chocolate}) \times 9$
 - $= 7.10 \times 9 = 63.90$
 - :. The cost of 9 chocolate is ₹ 63.90
- 3. 5 kg of mangoes cost ₹ 230. How

much is the cost of 15 kg of mangoes?

- **Sol.** The cost of 1 kg of mangoes
 - = (the cost of 5 kg mangoes) \div 5
 - = ₹230 ÷ 5 = ₹46
 - :. The cost of 15 kg of mangoes
 - = (cost of 1 kg of mango) \times 15
 - =₹46×15=₹690
 - ∴ The cost of 15 kg of mangoes is ₹ 690
 - 4. The total weight of 6 equal boxes is 54 kg. What is the weight of 25 such boxes?
- **Sol.** The weight of 1 box
 - = (the weight of 6 boxes) \div 6
 - = 54 kg \div 6 = 9 kg
 - :. The weight of 25 boxes
 - = (weight of 1 box) \times 25
 - $= 9 \text{ kg} \times 25 = 225 \text{ kg}$
 - :. The weight of 25 boxes is 225 kg
 - 5. 152 litres of oil can be stored in 8 containers. How much oil can be stored in 22 containers?
- **Sol.** Oil stored in 1 container
 - = (the oil stored in 8 containers) \div 8
 - $= 152 \text{ litres} \div 8 = 19 \text{ litres}$
 - :. Oil stored in 22 containers
 - = (oil stored in 1 container) \times 22
 - $= 19 \text{ litres} \times 22 = 418 \text{ litres}$
 - :. The oil stored in 22 containers in 418 litres.
 - 6. A car runs 352 km on 16 litres petrol. How many kilometres can it run on 25 litres petrol?
- Sol. Distance covered by the car on 1 litre petrol = (the distance covered in 16 litres petrol) \div 16=352 km \div 16=22 km
 - ∴ Distance covered by the car on 25 litres petrol = (Distance covered on 1 litre petrol) × 25 = 22 km × 25 = 550 km
 - :. Distance covered by the car on 25 litres petrol is 550 km.
 - 7. A boy runs 630 m in going round a field 3 times. How far will he run if he goes round it 9 times?
- **Sol.** Distance covered in run in 1 time
 - = (the distance covered in 3 times) \div 3
 - $=630 \,\mathrm{m} \div 3 = 210 \,\mathrm{m}$
 - :. Distance covered in running 9 times
 - = (Distance covered in 1 time) \times 9
 - $= 210 \,\mathrm{m} \times 9 = 1890 \,\mathrm{m}$

- .. Distance covered by the boy by going round 9 times is 1890 m.
- 8. 10 metre of cloth cost ₹ 1500. A women requires 6 metres to make a salwar-suit. What will it cost to make two salwar-suits?
- Sol. Cost of 1 metres of colth = (cost of 10 metres of cloth) \div 10

 \therefore Cost of 6 metres of cloth = (cost of 1 metre cloth) \times 6

Cloth required to make two salwar suits = $6 \text{ m} \times 2 = 12 \text{ m}$

 \therefore Cost of 12 metres of cloth = (cost of 1 metre of cloth) \times 12

- ∴ The cost of making two salwar-suits is ₹1800.
- 9. A year's rent of a house is ₹ 6840. If Mr. Harish wants the house for 9 months, how much rent will he has to pay?
- **Sol.** Rent of 1 month

= (Rent of 1 year)
$$\div$$
 12
= ₹ 6840 \div 12 = ₹ 570

:. Rent of 9 months

= (Rent of 1 month)
$$\times$$
 9
= $₹570 \times 9 = ₹5130$

- ∴ Mr Harish has to pay ₹ 5130 for the house as rent.
- 10. A bus is running at a uniform speed. It covers 375 km in 5 hours. How

much distance will it cover in 30 hours?

Sol. Distance covered in 1 hours

$$=$$
 (Distance covered in 5 hours) \div 5

$$= 375 \text{ km} \div 5 = 75 \text{ km}$$

:. Distance covered in 30 hours

= (Distance covered in 1 hour)
$$\times$$
 30

$$=75 \text{ km} \times 30 = 2250 \text{ km}$$

- :. Distance covered by the bus in 30 hours is 2250 km.
- 11. 7 bags of rice cost ₹ 455.00. Find the cost of 9 such bags of rice.
- **Sol.** Cost of 1 bag of rice

= (the cost of 7 bags of rice)
$$\div$$
 7

- :. Cost of 9 bags of rice
 - = $(\cos t \circ f \circ 1 \circ bag \circ f \circ rice) \times 9$
 - $= \stackrel{>}{\cancel{7}} 65 \times 9 = \stackrel{>}{\cancel{7}} 585.00$
- :. The cost of 9 bags of rice is 585.00.

Worksheet

How much for 7 CDs?

How much for 6 small garlands and 8 big garlands?

Ans.
$$6 \times 5 + 8 \times 10 = 30 + 80 = ₹110$$

How much for 4 shirts?

Ans. $250 \times 4 = ₹1000$

How much for 3 toys?

Ans. $100 \times 3 = ₹300$

What will be the cost of 18 notebooks?

Ans. 18 × 20 = ₹ 360

What is the cost of 5 pair of shoes?

Ans. $400 \times 5 = ₹2000$

14 Money

Exercise-35

1. Complete the chart:

Ans.

	No. of Coins of							
	25	20	10	50				aise
(a) Use only 25 p	4				4×25 =100	0 N	hat	100 Paise
(b) Use only 20 p		5			5×20 =100	E Rupee	Weknowthat	 - -
(c) Use only 10 p			10		10×10 =100		kh	Rupee
(d) Use only 50 p				2	2×50 =100		Š	-
(e) Use only 5 p					20×5 =100			

2. Calculate the total amount of money

Ans. (b)
$$({\stackrel{?}{\overline{}}}50 \times 2) + ({\stackrel{?}{\overline{}}}20 \times 2) + ({\stackrel{?}{\overline{}}}10 \times 1)$$

= ${\stackrel{?}{\overline{}}}100 + {\stackrel{?}{\overline{}}}40 + {\stackrel{?}{\overline{}}}10 = {\stackrel{?}{\overline{}}}150$

(c)
$$(\vec{\xi} 50 \times 4) + (\vec{\xi} 10 \times 1) + (\vec{\xi} 5 \times 2) + (\vec{\xi} 1 \times 3) = \vec{\xi} 200 + \vec{\xi} 10 + \vec{\xi} 10 + \vec{\xi} 3 = \vec{\xi} 223$$

(d)
$$(\stackrel{?}{\underbrace{}} 20 \times 2) + (\stackrel{?}{\underbrace{}} 50 \text{ p} \times 2) + (10\text{p}) = \\ \stackrel{?}{\underbrace{}} 40 + \stackrel{?}{\underbrace{}} 1 = \stackrel{?}{\underbrace{}} 41.10$$

(e)
$$(\mbox{$\stackrel{\checkmark}{$}$} 10 \times 3) + (\mbox{$\stackrel{\checkmark}{$}$} 5 \times 2) + (\mbox{$\stackrel{\checkmark}{$}$} 50 \ p \times 1)$$

 $+ (10 \ p \times 5) = \mbox{$\stackrel{\checkmark}{$}$} 30 + \mbox{$\stackrel{\checkmark}{$}$} 10 + 50 \ p +$
 $50 \mbox{$p$} = \mbox{$\stackrel{\checkmark}{$}$} 41$

(f)
$$(\vec{\xi} 50 \times 4) + (\vec{\xi} 20 \times 1) + (\vec{\xi} 10 \times 2)$$

 $+ (\vec{\xi} 1 \times 1) + (20p \times 3)$
 $= \vec{\xi} 200 + \vec{\xi} 20 + \vec{\xi} 1 + \vec{\xi} 60p$
 $= \vec{\xi} 241 + 60p = \vec{\xi} 241.60$

3. Write the following amounts of money in words:

- **Ans.** (a) Rupees thirty and paise forty-five
 - (b) Rupees seventy-five and paise fifty
 - (c) Rupees sixteen
 - (d) Rupees seventy-two and paise fifty-five
 - (e) Paise twenty-eight
 - 4. Write the following amounts of money in figures:
- **Ans.** (a) ₹35.28
- (b) ₹97.45
- (c) ₹55.37
- (d) ₹32.73
- (e) ₹48.00
- 5. Write the following amounts in words:
- **Ans.** (a) Rupees sixty-two and paise fifty-
 - (b) Rupees sixty-five and paise forty-five
 - (c) Rupees thirty-eight and paise twenty-five
 - (d) Rupees ninety-seven
 - (e) Rupees forty-five and paise eighty-five
 - (f) Paise seventy-five
 - 6. How many fifty paise coins make two rupees?
- **Ans.** : Two rupees = 200 pasie
 - \therefore Fifty paise coins in 200 paise = $200 \div 50 = 4$
 - :. 4 fifty pasie coins will make two rupees.
- 7. How many 25 paise coins will you get in exchange for ₹. 2 coin?
- Ans. Paise in $\sqrt[3]{2} = 2 \times 100$ paise = 200 paise Number of 25 pasie
 - coins in 200 paise
 - $=200 \text{ paise} \div 25 \text{ paise}$
 - =8 coins
 - ∴ In exchange of ₹ 2 coins number of 25 paise coins received is 8.

25)200(8

-200

20)200(25

-200

- 8. A 5-rupee coin is changed into 20 paise coins. How many 20 paise coins will you get for it?
- Ans. Paise in ₹ $5 = 5 \times 100$ Paise = 500 paise
 - Number of 20 paise coins in 500 paise
 - $=500 \, \text{paise} \div 20 \, \text{paise}$
 - $=25 \, \text{coins}$

For a 5-rupee coin one will get 25 paise of 20n

9. Gaurav gave five fifty paise coins, three 25 paise coins and two 20 paise

- coins to his friend Dinesh. How much money did Dinesh get?
- **Ans.** Money given by Gaurav
 - $=(50p \times 5) + (25p \times 3) + (20p \times 2)$
 - = ₹2.50 + ₹0.75 + ₹0.40 = ₹3.65
 - .. Money Dinesh get is ₹3.65
- 10. Rajani had seven 10 rupees notes and five 50 rupees notes. How much money did she have altogether?
- **Ans.** Money Rajni have
 - $= (\overline{z} 10 \times 7) + (\overline{z} 50 \times 5)$
 - =₹70+₹250=₹320
 - ∴ Money Rajni have is ₹320
 - 11. Geeta had four 20 rupees notes and six 10 rupees notes. She purchased a skirt for ₹ 125. How much money is left with her?
- Ans. Money with Geeta
 - $=({\clip}{?}20\times4)+({\clip}{?}10\times6)$
 - =₹80+₹60=₹140
 - Money left with her
 - = Total money Cost of the skirt
 - =₹140-₹125=₹15
 - ∴ Money left with Geeta is ₹15.
- 12. Which notes and coins you may use for paying ₹ 14.75?
- Ans. $\[\[\] \] \[\] \[$
 - .. Notes and coins used for paying
 - ₹ 14.75 75 One 10 rupees note, two 2 rupees note, one 50 paise coin and one 25 paise coin

Exercise-36

Bill for the above purchase is as under

1. Solution

1.	Solution	Ш				
Items	Quantity	Rate	Amount (quantity × rate)			
Rice	7 kg	₹ 63.00	₹ 441.00 → 63 × 7			
Oil	4 litres	₹ 91.75	₹ 275.25 \rightarrow 91.75 × 4			
Eggs	10	₹ 3.45	₹ 34.50 → 3.45 × 10			
Wheat	9 kg	₹ 9.25	₹ 9.25 → 9.25 × 9			
Total ₹ 834 00						

Solution

	Solutio	П	
Items	Quantity	Rate	Amount (quantity × rate)
Pizzas	7 kg	₹ 63.00	₹ 1520.00 → 95 × 16
Cold drink	4 litres	₹ 91.75	₹ 112.00 → 16 × 7
Pastries	10	₹ 3.45	₹ 150.00 → 10 × 15
Burgers	9 kg	₹ 9.25	₹ 126.00 → 18 × 7
		Tota	l ₹ 540 00

Salution

3. Solution								
Items	Quantity	Rate	Amount (quantity × rate)					
Mangoes	5 kg	₹ 29/kg	₹ 145.00					
			\rightarrow 29 × 5					
Guava	13 kg	₹ 11.75/kg	₹ 152.75					
			→ 11.75 × 13					
Grapes	7.8 kg	₹ 15.25/kg	₹ 118.95					
			→ 15.25 × 7.8					
Oranges	3.9 kg	₹ 13.50/kg	₹ 52.65					
			→ 13.50 × 3.9					
Bananas	7 dozens	₹ 19.75/	₹ 138.25					
		dozen	→ 19.75 × 7					
		Tota	I ₹ 607.60					

4. **Solution**

Items	Quantity	Rate	Amount (quantity × rate)					
Milk	2 kg	₹ 30/kg	₹ $60.00 \rightarrow 30 \times 2$					
Paneer	1 kg	₹ 180/kg	₹ 180.00 → 180 × 1					
Ghee	1 kg	₹ 300/kg	₹ 300.00 → 300 × 1					
Curd	1 kg	₹ 50/kg	₹ 50.00 → 50 × 1					
	Total ₹ 590.00							

Worksheet

Ans. Each ticket cost:

(a) ₹ 100 (b) ₹ 50 (c) ₹ 60 (d) ₹ 70

Note

1. How many players are there in a soccer team?

Ans.

In the game of soccer, which player in a 2. team can use his arms to throw the ball?

Ans. Goalkeeper

> What is the length and breadth of a 3. standard soccer field?

Ans. Length = $100 - 110 \,\text{m}$ Breadth = $64 - 75 \,\mathrm{m}$

4. What is a free kick? Discuss with your

A place kick that is allowed for a foul or Ans. infringement by other team.

Time

Exercise-37

15

- 1. Read the time shown by each clock:
- (a) 5 o'clock (b) 10 min. past 4 Ans.
 - (c) 50 min. past 8 (d) 40 min. past 4
- 2. Write the time in figures:
- (a) 8:10 Ans.
 - (b) 11:30 (c) 4:36 (d) 3:15
 - (e) 9:30 (f) 8:40

 - (g) 9:05 (h) 3:45
 - (i) 7:30
 - Write the following using a.m. or 3. p.m.:
- Ans. (a) 8.00 a. m.
- (b) 3:45 p.m.
- (c) 9:12 p.m.
- (d) 4:25 a.m.
- (e) 10:45 a.m.
- (f) 12:15 a.m.
- 4. Write the following using hours:
- Ans.
- (a) 1800 hrs.
- (b) 0030 hrs.
- (c) 2040 hrs.
- (d) 1115 hrs.
- (e) 1745 hrs.
- (f) 0730 hrs.
- (g) 2200 hrs.
- (h) 1515 hrs.
- (i) 1650 hrs.
- Write the time using 12 hour clock:
- 5. Ans.

- (b) 6:15 p.m.
- (a) 7 a.m (c) 12.00 noon
- (d) 4:30 p.m.(f) 2:03 p.m.
- (e) 1:18 a.m. (g) 12:50 a.m.
- (h) 12:00 midnight

Exercise-38

- Convertinto hours: 1.
- Ans. (a) 4 days
 - 1 day = 24 hours
 - $4 \text{ days} = 24 \times 4 = 96 \text{ hours}$
 - (b) 1 week
 - \therefore 1 day = 24 hours
 - 1 week = 7 days
 - $7 \, days = 24 \times 7 = 168 \, hours$
 - (c) 4 days 6 hours
 - 1 day = 24 hours
 - $4 \text{ days} = 24 \times 4 = 96 \text{ hours}$
 - 4 days 6 hours = 96 hours + 6 hours= 102 hours
 - (d) 13 days 5 hours
 - 1 day = 24 hours
 - $13 \text{ days} = 24 \times 13 = 312 \text{ hours}$
 - 13 days 5 hours = 312 hours + 5hours = 317 hours
 - (e) 16 days 2 hours
 - 1 day = 24 hours
 - $16 \, \text{days} = 24 \times 16 = 384 \, \text{hours}$
 - $16 \, \text{days} \, 2 \, \text{hours} = 384 \, \text{hours}$
 - + 2 hours = 386 hours

- (f) 2 weeks
- \therefore 1 day = 24 hours
- \therefore 1 week = 7 days
- \therefore 7 × 2 days = 24× 14 = 336 hours

2. Convertinto minutes:

- (a) 9 hours
- \therefore 1 hour = 60 minutes
- $\therefore 9 \text{ hours } = 9 \times 60 \text{ minutes}$ = 540 minutes
- (b) 7 hrs. 35 min
- \therefore 1 hr = 60 minutes
- $\therefore 7 \text{ hrs} = 7 \times 60 \text{ minutes}$ = 420 minutes
- :. 7 hrs 35 minutes
 - $= 420 \min + 35 \min = 455 \min$
- (c) 15 hrs 25 min
- \therefore 1 hr = 60 min
- \therefore 15 hrs = 15 × 60 min = 900 min
- ∴ 15 hrs 25 minutes
 - $= 900 \min + 25 \min = 925 \min$
- (d) 2 days
- \therefore 1 hr = 60 min
- \therefore 1 day = 24 hrs
- \therefore 2 days = 24 × 2 = 48 hrs
- \therefore 48 hrs = 48 × 60 min = 2880 min
- (e) 16 hrs. 20 min
- \therefore 1 hr = 60 min
- \therefore 16 hrs = 16 × 60 min = 960 min
- :. 16 hrs 20 min = 960 min + 20 min= 980 min
- (f) 20 hrs. 50 min
- \therefore 1 hr = 60 min
- \therefore 20 hrs = 20 × 60 = 1200 min
- \therefore 20 hrs 50 min = 1200 min + 50 min = 1250 min

3. Convertinto second:

- (a) 15 minutes
- \therefore 1 min = 60 seconds
- $\therefore 15 \min = 15 \times 60 \text{ seconds}$ = 900 seconds
- (b) 9 min. 9 sec.
- \therefore 1 min = 60 seconds
- \therefore 9 min = 9×60 = 540 seconds
- ∴ 9 min 9 sec
 - = 540 second + 9 seconds
 - =549 seconds
- (c) 25 min. 22 sec.
- \therefore 1 min = 60 sec
- \therefore 25 min = 25 × 60 sec
- \therefore 25 min 22 sec = 1500 sec + 22 sec = 1522 sec

4. Convertinto days and hours:

(a) 144 hours

To convert hours into days, we divide the given number by 24

 $24)\overline{144}(6)$ -144 \times

- \therefore 144 hours = 6 days
- (b) 625 hours

 To convert hours into days, we divide the given number by 24

 $\begin{array}{r}
24\overline{)625}26 \\
\underline{-48} \\
145 \\
\underline{-144} \\
\times 1
\end{array}$

- \therefore 625 hours = 26 days and 1 hour
- (c) 3785 hours
 To convert hours
 into days, we
 divide the given
 number by 24

 $\begin{array}{r}
-24 \\
138 \\
-120 \\
185 \\
-168 \\
17
\end{array}$

24)3785(157

- :. 3785 hours = 157 days and 17 hours
- (d) 988 hrs.

 To convert hours into days, we divide the give number by 24

2<u>4</u>)988(<u>4</u>1 <u>-96</u> 28 <u>-24</u> ×4

 \therefore 988 hours = 41 days and 4 hours

5. Change to hours and minutes:

minutes by 60

Ans. (a) 135 minutes

To convert minutes into hours, we divide the given number of

6<u>0</u>)135(2 -120 ×15

- ∴ 135 minutes
 - = 2 hours and 15 minutes
- (b) 275 minutes

To convert minutes into hours, we divide the given number of minutes by 60

 $60)275(4) -240 \times 35$

- ∴ 275 minutes
 - = 4 hours and 35 minutes
- (c) 528 minutes

To convert minute into hours, we divide the given number of minutes by 60

6<u>0</u>)528(8 - 480 ×48

- ∴ 528 minutes
 - = 8 hours and 48 minutes
- (d) 685 minutes
 To convert minutes
 into hours, we divide
 the given number of
 minutes by 60

- ∴ 685 minutes
 - = 11 hours and 25 minutes
- 6. Change to minutes and seconds:
 - (a) 75 seconds

60 seconds make a minute. To convert seconds into minutes, we divide the given number of seconds by 60

- ∴ 75 seconds
 - = 1 minute and 15 seconds
- (b) 285 seconds

To convert seconds into minute, we divide the given number of seconds by 60 $\frac{60)\overline{285(4)}}{\times 45}$

- ∴ 285 seconds
 - = 4 minutes and 45 seconds
- (c) 456 seconds

To convert seconds into minutes, we divide the given number of seconds by 60 $60\overline{)456(7)}$ -420 $\times 36$

- :. 456 seconds
 - = 7 minutes and 36 seconds

60)858(14

258

-60

(d) 858 seconds
To convert seconds

into minutes, we divide the given number of seconds

by 60

- ∴ 858 seconds
 - = 14 minutes and 18 seconds

Exercise-39

Solve the following word problems:

- 1. A cricket-match between England and India started at 10:15 a.m. and finished at 6:35 p.m. How long did the match last?
- **Sol.** 10:15 a.m. = 1015 hrs
 - $= 10 \, hrs. \, 15 \, minutes$

6:35 p.m. = 1835 hrs

 $= 18 \, hrs \, 35 \, minutes$

18 hrs. 35 min. -10 hrs. 15 min. 8 hrs. 20 min.

- :. The match lasts for 8 hrs and 20 min.
- 2. A boy went to see a movie at 2:45 p.m. and returned home at 7:35 p.m.

How long did he stay out?

Sol. 2:45 p.m. = 1445 hrs

 $= 14 \, hrs \, 45 \, minutes$

7:35 p.m. = 1935 hrs

 $= 19 \, \text{hrs} \, 35 \, \text{minutes}$

8 95 min. 19 hrs. 35 min. -10 hrs. 45 min. 4 hrs. 50 min.

- ... The boy stayed out for 4 hrs 50 min.
- 3. A school starts at 7:30 a.m. and closes at 1:45 p.m. Find the duration of working hours of the school.

Sol. 7:30 a.m. = 0730 hrs

 $= 7 \, \text{hrs} \, \text{and} \, 30 \, \text{min}$

1:45 p.m. = 1345 hrs

 $= 13 \, hrs \, 45 \, hrs$

13 hrs. 45 min. -7 hrs. 30 min.

6 hrs. 15 min.

- ... Duration of working hours of the school is 6 hrs 15 min.
- 4. Find the time interval between 8:45 a.m. and 1:20 p.m.
- **Sol.** 8:45 a.m. = 0845 hrs = 8 hrs . 45 min 1:20 p.m. 1320 hrs = 13 hrs 20 min

2 80 13 hrs. 20 min. -8 hrs. 45 min. 4 hrs. 35 min.

- :. The times interval is 4 hrs 35 min.
- 5. A girl takes singing lesson everyday. She spends altogether 7 hrs. 28 min. in a week in singing. How much time in a day does she spend in singing lesson?
- **Sol.** $7 \text{ hrs } 28 \text{ min} \div 7$

7)7 hrs. 28 min. (1 hrs 4 min $\frac{7}{\times}$ 28 $\frac{-28}{\times}$

- :. Time spent each day in singing = 1 hr 4 min.
- 6. A trains leaves from Kolkata at 1340 hrs. and reaches at Tata Nagar after 4 hrs. 45 min. At what time does it reach at Tata Nagar?

Ans. $1340 \, \text{hrs} = 13 \, \text{hrs} \, 40 \, \text{min}$

- \therefore 85 min = 1 hr 25 min
- \therefore 17 hrs 85 min = 18 hrs 25 min
- :. The train will reach Tata Nagar at 18 hrs 25 min
- 7. Students of class IV play for 35 minutes everyday. What time do they spend altogether on play in 4 days?

Ans. 35 = 140 minutes

$$\times 4$$
 = $(120 + 20)$ min
 $= 2 \text{ hrs } 20 \text{ min}$

- :. The students spend 2 hrs 20 minutes on play.
- 8. A man goes for morning walk everyday at 4:30 a.m. If he walks for 1 hour 30 minutes, when does he return from the walk?
- **Ans.** 4:30 a.m. = 0430 hrs = 4 hrs 30 min

- = 5 hrs 60 min = 5 hrs + (1 hr)
- = 6 hrs = 06 hrs = 6 : 00 am.
- :. The returns from walk at 6.00 a.m.
- 9. An aeroplane takes off from Mumbai at 8:45 p.m. It lands at Delhi at 11 p.m. How long does it take to reach Delhi.
- **Ans.** 8:45 p.m. = 2045 hrs = 20 hrs 45 min 11:00 p.m. = 2300 hrs = 23 hrs 00 min

- :. The aeroplane takes 2 hrs 15 minutes to reach Delhi.
- 10. What was the time 3 hrs. 12 min. before 8.30 a.m.?

The time was 5:18 a.m.

11. What will be the time 5 hrs. 20 min. after 6:45 p.m.

Ans. 18 hrs. 45 min. +5 hrs. 20 min. 23 hrs. 65 min.

23 hrs 65 min

= 23 hrs (60 + 5) min

= (23 hrs + 1 hr) 5 min = 24 hrs 5 min

= 00 hrs 5 min = 00 : 05 a.m.

- 12. On a certain day the sun rises at 5:15 a.m. and sets at 5:45 p.m. Find the time between sunrise and sunset.
- Ans. 5:15 a.m. = 01515 hrs = 5 hrs 15 min 5:45 p.m. = 1745 hrs = 17 hrs 45 min

- .. The time between sunrise and sunsent is 12 hrs 30 min.
- 13. An examination starts at 10:30 a.m. The duration of it is 2 hours 30 minutes. At what time does the examination finish?

Ans. 10 hrs. 30 min. +2 hrs. 30 min. 12 hrs. 60 min.

- = 12 hrs 60 min = 12 hrs + 1 hrs
- = 13 hrs, converting into 12 hr clocks 1300 hrs = 1:00 p.m.
- :. The examination will finish at 1: 00 p.m.
- 14. A group of school children went on a camp. It took them 4 hrs. 5 minutes by bus and 3 hrs. 50 min. by train. How much time did the journey take?

Ans. 4 hrs. 05 min. +3 hrs. 50 min. 7 hrs. 55 min.

The journey lasts for 7 hrs 55 minutes.

- 15. Subtract 15 years 8 months from 20 years.
- - :. 4 years 4 months

Worksheet

The swimming championships for the various towns were being conducted at various venues in swimming pools. Here are the starting dates and timings. Find out the finishing dates and the duration in hours and minutes:

Ans. Venue A:

Finishing date 6th May
Duration of each day 4 hrs 40 min
Venue B:
Finishing data 6th June

Finishing date **6th June**Duration of each day **4 hrs 40 min Venue C:**

Finishing date 4th July
Duration of each day 4 hrs 10 min

Pictograph

16

Exercise-40

1. The pictograph below shows the number of times four teams won at their games this year. Each whole cup means two wins, half a cup means one win.

Now answer the following questions

Ans.

- (a) Team with hightest cups = flying birds
- :. flying birds won the most game
- (b) Team with 1st cups = Silver star
- :. Silver star won the least games
- (c) Cups against Red Star

$$=2$$
 whole $+1$ half

$$= 2 \times 2 + 1 = 5$$
 wins

Cups against silver star = 2 full = $2 \times 2 = 4$ wins

- :. Red star won 1 game more than silver star
- (d) Cups against Golden Rays

$$=3$$
 whole and 1 half

$$= 3 \times 2 + 1$$

$$= 6 + 1 = 7 \text{ wins}$$

Cups against + Red star

= 2 whole and 1 half

 $= 2 \times 2 + 1$

$$=4+1=5$$
 wins

- \therefore Total wins = 7+5=12
- :. Golden Rays and Silver star won 12 games altogether.
- (e) Cups against Flaying Birds

=4 whole and 1 half

$$=4 \times 2 + 1 = 8 + 1 = 9 \text{ wins}$$

Cups against Silver Star

=2 whole

 $=2\times2=4$ wins

Total wins = 9 + 4 = 13 wins

- :. Flying Birds and Silver Star won 13 games altogether.
- 2. If one mango represents 10 mangoes. How many mangoes are represented by the figure?

Ans. (a) Number of figures = 5

.. Number of mangoes

 $= 5 \times 10 = 50$ mangoes

(b) Number of figures = 6 Numbers of mangoes

 $= 6 \times 10 = 60 \text{ mangoes}$

(c) Number of figures = 7

Number of mangoes

 $= 7 \times 10 = 70 \text{ mangoes}$

3. The pictograph shown below shows the number of students in a library, reading different kinds of books:

Now, Read the above pictograph and answer the questions:

Ans. (a) 6+8+10+4+2=30 students

(b) Number of student reading comices = 8

Number of student reading novel

Number of student reading novel = 4

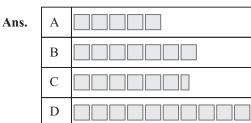
- \therefore Difference = 8-4=4
- (c) Maximum figures are aginst magazines
- :. Magazines are read by the maximum number of Students
- 4. A factory made 1000 trousers in January, 1500 trousers in February, 3500 trousers in March and 2500 trousers in April. Use a shape to represent 1000 trousers made in each of the month by pictograph.

Ans.

			0	
January				
February	1			
March	Ï			
April		J		

Here 1 trouser represents 1000 trousers

5. Make a pictograph to show the numbers of litres of milk sold at different booths in a day. Use a square to represent 10 litres.



Here 1 square represents 10 litres.

The given pictograph shows various 6. fruits available with a fruit seller.

Test Time - 1

1. Add:
$$3\frac{3}{4} + 4\frac{1}{4} + 3\frac{1}{2}$$

Ans. $3\frac{3}{4} + 4\frac{1}{4} + 3\frac{1}{2}$

$$= \frac{15}{4} + \frac{17}{4} + \frac{7}{2}$$

$$= \frac{15 + 17 + 7}{4}$$

$$= \frac{46}{4} = 11\frac{2}{4}$$
2. Write $\frac{85}{7}$ as a mixed fraction.

Ans.
$$7)85(72)$$
 -7
 15
 -14
 1
 $= 12\frac{1}{7}$

Write 8 $\frac{2}{13}$ as an improper fraction. = $\frac{13 \times 8 + 2}{13} = \frac{106}{13}$

Ans.
$$=\frac{13 \times 8 + 2}{13} = \frac{106}{13}$$

Arrange the following fractions in 4. ascending order:

Ans.
$$\frac{2}{3}, \frac{5}{6}, \frac{1}{9}$$

LCM of 3, 6, 9 = 18
 $= \frac{2 \times 6}{3 \times 6}, \frac{5 \times 3}{6 \times 3}, \frac{1 \times 2}{9 \times 2}$
 $= \frac{12}{18}, \frac{15}{18}, \frac{2}{18}$
ascending order = $\frac{12}{18}, \frac{15}{18}, \frac{2}{18}$
putting respective values = $\frac{1}{9}, \frac{2}{3}, \frac{5}{6}$

 \therefore ascending order = $\frac{1}{9} < \frac{2}{3} < \frac{5}{6}$

Ans. (a)
$$9 \times 100 + 6 \times 100 + 11 \times 100 + 12 \times 100$$

= $900 + 600 + 1100 + 1200$
= 3800 fruits

(b) Number of mangoes
=
$$11 \times 100 = 1100$$

Number of apples = 12×100
= 1200
Total = $1100 + 1200 = 2300$

(c) Number of bananas =
$$9 \times 100$$

= 900
Number of guavas = $6 \times 100 = 600$
Bananas are more by
 $900 - 600 = 300$

- (d) Apples

5. Substract:
$$6\frac{1}{3} - 3\frac{2}{9}$$

Ans. $6\frac{1}{3} - 3\frac{2}{9}$
 $=\frac{19}{3} - \frac{29}{9}$ Taking LCM,
 $=\frac{19 \times 3}{3 \times 3} - \frac{29 \times 1}{9 \times 1}$
 $=\frac{57}{9} - \frac{29}{9} = \frac{28}{9}$

Simplify: $13\frac{1}{3}1 \div 3\frac{4}{7}$ $13\frac{1}{3}1 \div 3\frac{4}{7}$

Ans.
$$13\frac{1}{3}1 \div 3\frac{4}{7}$$

 $=\frac{40}{3} \div \frac{25}{7} = \frac{40}{3} \times \frac{7}{25}$
 $=\frac{280}{75} = 3\frac{55^{11}}{2515} = 3\frac{11}{15}$

 $= \frac{40}{3} \div \frac{25}{7} = \frac{40}{3} \times \frac{7}{25}$ $= \frac{280}{75} = 3 \cdot \frac{55^{11}}{75_{15}} = 3 \cdot \frac{11}{15}$ Rakesh painted a bench in $2\frac{2}{3}$ hours and a desk in $1\frac{1}{6}$ hours. How much time did he spend altogether? 7.

Ans. Time taken to paint the bench =
$$2\frac{2}{3}$$
 hrs
Tim taken to paint the desk = $1\frac{1}{6}$ hrs
Total time spent = $2\frac{2}{3} + 1\frac{1}{6}$ hrs
$$= \frac{9}{3} + \frac{7}{6} = \frac{18}{6} + \frac{7}{6}$$

$$= \frac{25}{6}$$
 hrs = $4\frac{1}{6}$ hrs.

 $= \frac{25}{6} \text{ hrs} = 4 \frac{1}{6} \text{ hrs}.$ Ramesh bought $5\frac{1}{2}$ kg of potatoes and Rahim bought $5\frac{4}{5}$ kg of 8. potatoes. Who bought more potatoes and by how much?

Ans. Potatoes bought by Ramesh
$$= 5 \frac{1}{2} \text{ kg} = \frac{11}{2} \text{kg}$$

Potatoes bought by Rahim

$$=5\frac{4}{5}kg=\frac{29}{5}kg$$

Now
$$\frac{11}{2}$$
 and $\frac{29}{5}$ kg
= $\frac{11 \times 5}{2 \times 5}$ and $\frac{29 \times 2}{5 \times 2}$
= $\frac{55}{10}$ and $\frac{58}{10}$

So Rahim bought more potatoes by

$$\frac{58}{10} - \frac{50}{10} = \frac{8}{10} \text{kg or } \frac{4}{5} \text{kg}$$

- 9.
- So Rainin lought more, $\frac{58}{10} \frac{50}{10} = \frac{8}{10} \text{ kg or } \frac{4}{5} \text{ kg.}$ Simplify: $3 \frac{7}{9} \times 2 \frac{2}{5}$ $= \frac{34}{93} \times \frac{24}{5} = \frac{136}{15}$ A man earns ₹ 460 1 Ans.
- 10. A man earns ₹ 460 per month. He spends $\frac{7}{8}$ of his earnings. How much does he save per month?
- Total earning=₹460 Ans.

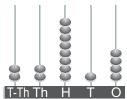
Expenditure =
$$\frac{7}{8}$$
 of 460
= $\frac{7 \times 460^{230}^{115}}{8 \times 2}$
= $\frac{805}{2}$ = 402.50

Savings = ₹460 – ₹402.50 =₹57.50

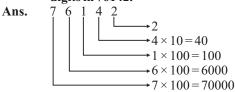
- Product of two numbers is $3\frac{2}{7}$. If one of them is $11\frac{1}{2}$ find the other 11.
- Other number = $3\frac{2}{7} \div 11\frac{1}{2}$ = $\frac{25}{7} \div \frac{23}{2}$ = $\frac{25}{7} \times \frac{23}{2} = \frac{50}{161}$ What is $\frac{3}{4}$ of a kg? Ans.
- 12.
- ∴ 1 kg = 1000 gm∴ $\frac{3}{4} \text{ of a kg} = \frac{3}{\cancel{4}} \times 1000^{250}$ $= 3 \times 250 \text{ g} = 750 \text{ g}$
- Total length of 3 pieces of cloth of 13. equal lengths is 87 metres. What is the length of each piece of cloth?
- Ans. Total length = 87 metres Number of pieces = 3 Length of each piece = $87 \div 3$ $=29 \, \text{metres}$

Test Time-2

- Write the following numerals as 1. directed:
- Ans. (a) (b) (c) (d) १३४
 - 2. Write the Roman numerals for each of the following Hindu Arabic numerals:
- Ans. (a) XVIII (b) XXVI (c) XXXIV (d) XXXIX
- 3. Write the following Roman numerals in Hindu-Arabic Form: (b) 25 Ans. (c) 29
- Represent 22714 on the abacus. 4. Ans.



- 5. Fill in the blanks:
- Ans. (a) 10 ones = 1 hundred
 - (b) 1 thousand = 100 tens
 - (c) 10 thousands = 1 ten thousand
 - (d) 1 hundred = 10 tens
 - 6. Find the place value of each of the digits in 76142.

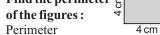


- 7. Write 480257 in the expanded form.
- 480257 Ans. =400000+80000+200+50+7
- 8. Counting by tens, write the numbers from 200032 to 200092.
- Ans. 200032, 200042, 200052, 200062, 200072, 20082, 200092
 - 9. Write the smallest and the greatest 5-digit numbers using the digits 7, 0, 1, 6, 3.
- Ans. Smallest = 10367Greatest = 76310
- 10. Add the following numbers:
- (a) 35420, 20524, 25568 Ans. =35420+20524+25568=81512

- (b) 43602, 27052, 5277 =43602+27052+5277
 - =75931
- 11. Find the difference between 7622 and 2504.
- Ans. 7622 - 2504 = 5118
- The difference of two numbers is 12. 43805. If the greater number is 60000, find the smaller number.
- Smaller number = 60000 43805Ans. =16195
- 13. What number is 5274 less than 8005?
- **Ans.** : 8005 5274 = 2731
 - 2731 is 5274 less than 8005 *:*.
- 14. Add 303, 333 and 30033.
- 303 + 333 + 30033 = 30669Ans.
- 15. Find the number which is 2850 more than 35675.
- **Ans.** : 35675 + 2850 = 38525
 - 38525 is 2850 more than 35675 *:*.

Test Time - 3

- How many sides are there in a 1. square?
- Ans. 4 sides
 - 2. How many types of angles are there?
- Ans. 4; Acute, Obtuse, Straight, Right
 - How many degrees are there in a 3. straight angle?
- 180° Ans.
 - 4. Write the measure of an angle which is its own supplementary angle?
- Ans.
 - Find the perimeter ह 5. of the figures:



- Ans.
 - = Sum of all sides
 - =4cm+4cm+4cm+4cm+4cm
 - =20cm
 - The length and breadth of a 6. rectangular field are 125 m and 62 m respectively. If a girl runs around the field twice, find the distance covered by her.
- Length = 125m, Breadth = 62m Ans.
 - Perimeter = $2 \times (L + B)$
 - $=2 \times (125m + 62m)$
 - $= 2 \times 187 \text{m} = 374 \text{m}$
 - Total distance covered by the girl $=374 \times 2m = 748 \text{ m}$

7. Identify which of the following designs are symmetrical:



- (i), (ii), (iii), (iv), (v), (vi), (vii), (viii) Ans.
 - 8. Prepare a pictograph from the following data for four cold drink shops sales on Sunday:

Shop A-300, Shop B-600, Shop C-250 and Shop D-500.

	200 unu shop 2 coo.								
Ans.	Shop A								
	Shop B								
	Shop C								
	Shop D								

bottle represents 100 bottles Here 1

9. A girl covers 82 m while going one time round the park which is 15 m wide. Find the length of the park.

Perimeter = 82 m, Breadth = 15m Ans.

$$P = 2 \times (l+B)$$

$$\Rightarrow 82 \text{ m} = 2 \times (l+15\text{m})$$

$$\Rightarrow 82 \text{ m} = 2l+30 \text{ m}$$

$$2l = 82m - 30m = 52m$$

$$\Rightarrow \qquad l = \frac{52}{2} \text{m} = 26 \text{ m}$$

 \Rightarrow

10. The length of rectangular pond is twice it breadth and if the breadth is 150 m find the perimeter of the pond.

Length = $2 \times B$, Breadth = 150 mAns.

$$\Rightarrow Lenght = 2 \times 150 \text{ m} = 300 \text{ m}$$

$$\therefore P = 2 \times (L+B)$$

$$P = 2 \times (L+B)$$

= 2 \times (300m + 150 m)
= 2 \times 450 m = 900 m

11. The cost of a packet containing a dozen of chocolate bars is ₹ 72. Find the cost of 6 such chocolate bars.

Cost of 1 chocolate bar Ans.

= (the cost of dozen chocolate bars)
$$\div$$
 12
= $₹72 \div 12 = ₹6$

- Cost of 6 chocolate bars
 - = (cost of 1 chocolate bar) \times 6
 - =₹6×6 =₹36
- The cost of 6 chocolate bars is ₹ 36
- Add 48 hours 44 minutes and 30 12. hours 48 minutes.

- $=78 \, \text{hrs}$ and $88 \, \text{min}$
- = 78 hrs and (60 m + 28 min)
- = (78 hrs + 1 hr) and 28 min
- $= 79 \, \text{hrs}$ and $28 \, \text{min}$.

13. Find the difference between 25 minutes 30 seconds and 12 minutes 40 seconds.

Ans.

24		90	
25	minutes	30	seconds
-12	minutes	40	seconds
12	minutes	50	seconds

 \therefore Difference = 12 min. and 50 sec.

Test Time-4

1. Draw the hands of the clocks to show the exact time:

Ans.





2. Write the time using a.m. or p.m.

$$= 0645 \, \text{hrs} + 0200 \, \text{hrs}$$

$$= 0845 \, \text{hrs} = 8 : 45 \, \text{a.m.}$$

(b)
$$9:20 \text{ p.m.} + 3 \text{ hours}$$

$$= 2120 \, hrs + 3 \, hours$$

$$= 2420 \, hrs$$

$$= 00:20 \text{ a.m.}$$

3. Find the number of days between (do not include either date).

:. Total days =
$$24 + 26 = 50$$
 days
(b) Days in July = $31 - 7 = 24$ days

Days in August =
$$26$$

 \therefore Total days = 24 + 26 = 50 days

4. Find the cost of:

$$= (\text{Cost of 1 box}) \times 9$$

$$=$$
 (Cost of 8 mugs) \div 8

5. Look for the pattern and complete the series

Ans. (a) 7, 14, 21, 28, 35, **42,49,56,63**

(b) 258, 268, 278, 288, **298, 308, 318, 328**

6. Complete the number towers.

Ans.

(a)		34			(b)			3	5		
	1	8	1	6			7	7	Į	5	
	10	1	8	8		7	7		1	į	5

7. Solve the following:

Ans.

(a)
$$6:45 \text{ a.m.} = 6 \text{ hrs } 45 \text{ min}$$

- = 6 hrs and (60 min + 35 min)
- = (6hrs + 1 hr) and 35 min
- =7 hrs 35 min
- $= 0735 \, hrs$
- = 07:35 a.m.
- ∴ Rohit will return at 7:35 a.m.
- (b) Number of leave days in may

$$=31-25=6$$
 days

Total leave days
$$= 18$$

Leave days left =
$$18 - 6 = 12$$

- \therefore Number of leave days in June = 12
- :. He have to join office on 13th June.

8. Fill the missing numbers.

Ans. (a) $5 \times 42 = 210$ (b) $6 \times 60 = 360$

$$=6736-1463$$

= 5273

(b)
$$2197 + 145 - 1853$$

= $2342 - 1853$

$$=2342-1853$$

= 489

10. Draw line segments of the following length:

s. (a)
$$4\frac{1}{2}$$
cm = $\frac{9}{2}$ cm = 4.5 cm

(b)
$$7\frac{1}{2}$$
cm $=\frac{15}{2}$ cm

$$=7.5 \,\mathrm{cm}$$