

Key to Navjeevan Practice Book

Standard
6

Teacher's Copy

Mathematics


NAVJEEVAN

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MUMBAI ★ PUNE

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Part One

1. Basic Concepts in Geometry

FORMATIVE EVALUATION

Unit Test

Q.1. [A] (1) False (2) True (3) False (4) True (5) False

[B] (1) innumerable (2) two
(3) intersecting (4) one and only one

Questionnaire (Text Book Practice Set - 1)

Q.1. [A] (1) Collinear points : M,O,T; R,O,N
(2) Ray : Ray OM, Ray OR, Ray OS, Ray OT, Ray ON, Ray OP
(3) Line segments : segment MT, segment RN
(4) Lines : line MT, line RN

[B] (1) c (2) d (3) b (4) a

[C] (1) Ray AB (2) segment XY or YX (3) Line AB
(4) Point M (5) Plane A (6) Line l

Quiz

Q.1. [A]

	Fig. 1	Fig. 2
(1)	AB is a segment	AB is a line
(2)	Line XY and line AB are intersecting lines	Line XY and line AB are parallel lines
(3)	Lines AB, CD and PQ are not concurrent lines	Lines AB, CD and PQ are concurrent lines
(4)	Points L, M, N are Collinear Points	Points L, M, N are non-Collinear Points

Home/Class Assignment

Q.1. (i) Lines : Line AB

Segments : Seg AB, Seg BC, Seg AC

(ii) Lines : Line AB

Segments : Seg AB

Rays : Ray CQ, Ray CB, Ray CA, Ray CP

Q.2. (1) Line LM, line MO and line MN.

(2) Line LM, line LO and line LN.

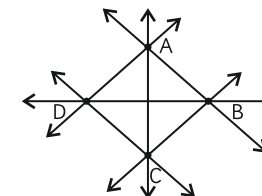
(3) Points M, P, O; Points L, P, N.

(4) When three or more lines pass through a given point then that point is called the point of concurrence. Only two lines are passing through point P.

\therefore It is not a point of concurrence.

Q.3. Six lines can be drawn through any two points of A, B, C, D.

Lines AB, BC, CD, DA, AC and BD



Q.4. Collinear points :

(1) S,M,T (2) P,N,R (3) L,M,N.

Non-collinear points :

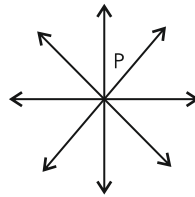
(1) L,M,S (2) L,M,T (3) T,M,N
(4) M,N,R (5) M,N,P (6) S,M,N

Semester Examination

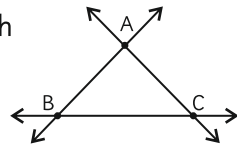
Subjective Type / Short Answer Type

Q.1.	Names of the points	Collinear points	Non-collinear points
	K, Y, T	✓	
	X, Y, T		✓
	T, Y, Z		✓
	X, Y, Z	✓	

Q.2. Infinite number of lines can be drawn passing through point P.



Q.3. Three lines can be drawn passing through the sets of 2 points of A, B, C



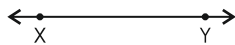
Q.4. Segments : seg OZ, seg OY, seg OT, seg TY

Lines : Line WV

Rays : Ray OV, Ray OW, Ray ZX

Q.5. Seg LM, Seg MN, Seg NO

Q.6.



One and only one line can be drawn passing through the two points X and Y.

Long Answer Type

Q.1.	Collinear points	Non-collinear points
	L, M, K	L, M, D K, L, B
	B, M, D	L, M, B K, L, D
		B, M, K B, K, D
		D, M, K B, L, D

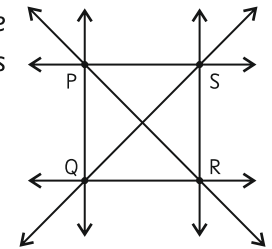
Q.2. (i) Collinear Points : Points B, C, D.

(ii) Non-collinear Points : Points A, B, C; Points A, C, D; Points A, B, C, D; Points A, B, D

(iii) Line AB, line AC, line AD are concurrent lines and their point of concurrence is point A.

Q.3. (1) Line PQ, line QS and line QR are the lines whose point of concurrence is Q.

(2) Lines PS, SR and QS are concurrent.



(Text Book Practice Set - 1)

Q.4. Parallel lines : Line $b \parallel$ line $m \parallel$ line q and line $a \parallel$ line p .

Concurrent lines : Point A is the point of concurrence for lines a, b and c .

Point D is the point of concurrence for lines p, q and AD .

Q.5. Line l , Line AB and Line AD.

2. Angle

FORMATIVE EVALUATION

Unit Test

- Q.1. [A]** (1) Right (2) acute (3) obtuse
(4) BA, BC (5) degree

[B] (1)-(b), (2)-(a), (3)-(d), (4)-(e), (5)-(c).

Questionnaire

- Q.1. [A]** (1) True (2) False (3) True (4) False

[B] (1) $\angle SPQ$ (2) 30° (3) acute
(4) P (5) ray PS and ray PQ

(Text Book Practice Set - 2)

[C] (1) Straight angle (2) acute angle (3) Complete angle
(4) Zero angle (5) Reflex angle (6) right angle
(7) Obtuse angle (8) Obtuse angle

Quiz

- Q.1. [A]** (1) 90° (2) less (3) more
(4) $\angle XYZ$ (5) equal to

[B] (a) Acute angle (b) Right angle (c) Obtuse angle
(d) Straight angle (e) Zero angle (f) Complete angle

[C] (1)-(b), (2)-(c), (3)-(d), (4)-(a).

Orals

- Q.1.** (1) obtuse (2) acute (3) QR
(4) right (5) reflex

SUMMATIVE EVALUATION

Semester Examination

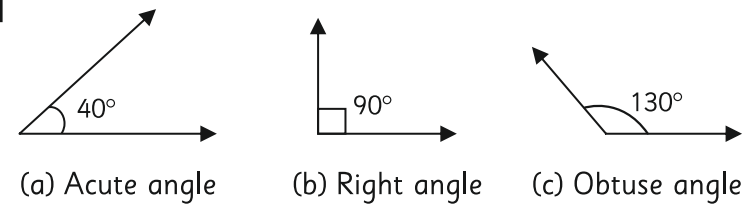
Objective Type

- Q.1. [A]** (1) 360° (2) 0° (3) less than 90°
(4) 90° (5) 180°

Subjective Type

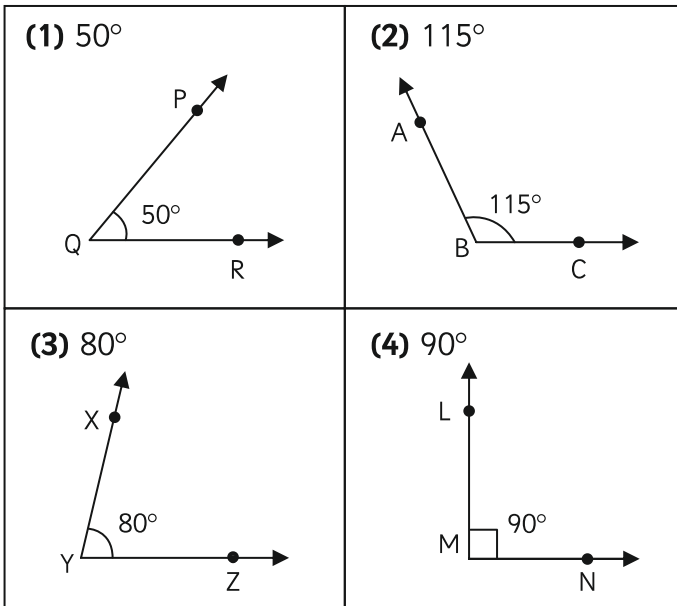
(Text Book Practice Set - 2)

Q.1. [A]

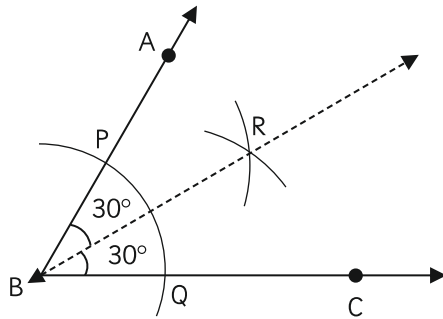


(Text Book Practice Set - 3)

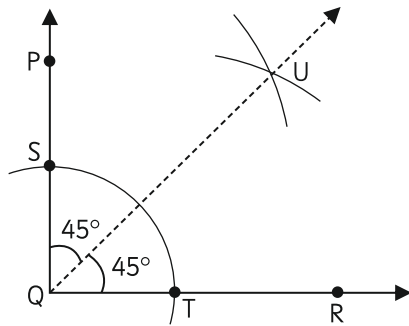
[B]



[C]



[D]



3. Integers

FORMATIVE EVALUATION

Unit Test

Q.1. (1) zero (2) smaller (3) smaller (4) right (5) left

Q.2. (a) +13 (b) -5 (c) -13 (d) +21 (e) +100

(Text Book Practice Set - 4)

Q.3. Positive numbers : +4, 7, +26, 19, +8, 5, 27

Negative numbers : -5, -2, -49, -37, -25, -4, -12

Q.4. Shimla = -7°C , Leh = -12°C , Delhi = $+22^{\circ}\text{C}$, Nagpur = $+31^{\circ}\text{C}$.

Q.5. (1) A submarine is at a depth of -512 metres from the sea level.

(2) The height of Mt. Everest, the highest peak in the Himalayas, is $+8848$ metres from the sea level.

(3) A kite is flying at a distance of $+120$ metres from the ground.

(4) The tunnel is at a depth of -2 metres from the ground.

Questionnaire

Q.1. (1) True (2) False : (Negative five is written as -5 in symbol)

(3) True (4) True (5) False : (Addition of a and 0 is a.)

(Text Book Practice Set - 7)

Q.2. (1) < (2) > (3) > (4) > (5) > (6) >

(7) = (8) < (9) > (10) < (11) < (12) =

(Text Book Practice Set - 6)

Q.3. $-47, -52, +33, +84, +21, -16, +26, -80$

(Text Book Practice Set - 5)

Q.4. (A) (1) 14 (2) 6 (3) -1 (4) -5 (5) -8

(6) -7 (7) 13 (8) 78 (9) 9 (10) -4

(B) (1)

+	8
-2	$-2+8=6$
6	$6+8=14$
0	$0+8=8$
-4	$-4+8=4$

(2)

+	4
-2	$-2+4=2$
6	$6+4=10$
0	$0+4=4$
-4	$-4+4=0$

(3)

+	-3
-2	$-2-3=-5$
6	$6-3=3$
0	$0-3=-3$
-4	$-4-3=-7$

(4)

+	-5
-2	$-2-5=-7$
6	$6-5=1$
0	$0-5=-5$
-4	$-4-5=-9$

- Q.5. (A) (1) 3 (2) -13 (3) 7 (4) -3 (5) 0**
(6) 85 (7) 25 (8) +5 (9) +5 (10) 0

(Text Book Practice Set - 8)

(B)

-	6	9	-4	-5	0	+7	-8	-3
3	$3-6=-3$	-6	7	$(3)-(-5)=3+5=8$	3	-4	11	6
8	$8-6=2$	-1	12	$8-(-5)=8+5=13$	8	1	16	11
-3	$-3-6=-9$	-12	1	$-3-(-5)=-3+5=2$	-3	-10	5	0
-2	$-2-6=-8$	-11	2	$-2-(-5)=-2+5=3$	-2	-9	6	1

Quiz

1. **(A) (1) left (2) N (3) left (4) +5 (5) E**
(B) (1) smaller (2) -4 and -6
(3) greater (4) +13 (5) -247

Orals

1. **(1) positive (2) negative (3) greater**
(4) smaller (5) 0 & -2

SUMMATIVE EVALUATION

Semester Examination

Objective Type

- Q.1. (1) +2 (2) -6 (3) -10 (4) 0**
(5) +18 (6) -23 (7) +12 (8) -25
- Q.2. (1) +600 metres (2) -30°C (3) -320 metres**
(4) -834 (5) +1,200
- Q.3. Numbers on the left of 0: -9, -28, -100, -4, -1, -48, -95, -16**
Numbers on the right of 0: +5, +81, 1, 72, +65, 22

- Q.4. (1) 0 (2) +1 (3) G (4) j (5) 2 (6) +2**

- Q.5. (a) (1) < (2) = (3) < (4) < (5) < (6) >**
(7) > (8) > (9) > (10) > (11) > (12) >

- (b) (1) +4, +5, +6, +7, +8 (2) -6, -7, -8**
(3) +8 (4) -8
(5) -3, -2, -1, 0, 1 (6) -4, -5, -6, -7, -8
(7) +5, +6, +7, +8

- Q.6.** Since there are unlimited number of integers both on the left and right, we cannot tell the biggest or the smallest integer. The smallest positive integer is +1. The biggest negative integer is -1.

- Q.7. (1) +20 (2) 0 (3) -30 (4) 0 (5) 0**
(6) +4 (7) -15 (8) +20 (9) +19 (10) -8

- Q.8. (1) 3 (2) -3 (3) 13 (4) -7 (5) -25**
(6) 25 (7) 10 (8) -10 (9) 7 (10) 0
(11) 74 (12) 100

- Q.9. (1) -11 (2) -2 (3) 25 (4) 3 (5) 11**
(6) 11 (7) -18 (8) 2 (9) -12 (10) -26
(11) 0 (12) -2

4. Operations on Fractions

FORMATIVE EVALUATION

Unit Test

Q.1. [A] (1) equal (2) proper (3) mixed fractions
(4) one (5) reciprocal

[B] (1)-(a), (2)-(d), (3)-(c), (4)-(b).

Questionnaire

Q.1. [A] (1) $\frac{13}{5}$ (2) $\frac{1}{2}$ (3) $\frac{9}{4}$ (4) $3\frac{1}{2}$ (5) $\frac{1}{8}$

(Text Book Practice Set - 9)

[B] (1) $\frac{37}{5}$ (2) $\frac{31}{6}$ (3) $\frac{19}{4}$ (4) $\frac{23}{9}$ (5) $\frac{12}{7}$

(6) $\frac{44}{9}$ (7) $\frac{39}{7}$ (8) $\frac{53}{18}$ (9) $\frac{7}{4}$ (10) $\frac{11}{5}$

[C] (1) $4\frac{2}{7}$ (2) $1\frac{3}{4}$ (3) $1\frac{3}{12}$ (4) $1\frac{3}{8}$

(5) $5\frac{1}{4}$ (6) $2\frac{6}{7}$ (7) $2\frac{3}{4}$ (8) $3\frac{1}{7}$

(9) $3\frac{1}{3}$ (10) $3\frac{3}{5}$

[D] (1) Each person will get $1\frac{4}{5}$ kg rice.

(2) To make each shirt $2\frac{1}{5}$ metres cloth is needed.

Orals

Q.3. (A) (1) $\frac{99}{91}$ (2) $\frac{3}{2}$ (3) $2\frac{4}{5}$ (4) $\frac{1}{100}$ (5) 16

(B) (1)-(d), (2)-(c), (3)-(a), (4)-(b).

SUMMATIVE EVALUATION

Semester Examination

Subjective Type

(Text Book Practice Set - 10)

Q.1. [A] (1) $= \frac{6 \times 3 + 1}{3} + \frac{2 \times 3 + 1}{3}$
 $= \frac{19}{3} + \frac{7}{3} = \frac{19 + 7}{3}$

Ans. $\frac{26}{3} = 8\frac{2}{3}$

(2) $\frac{19}{4} = 4\frac{3}{4}$ (3) $\frac{257}{35} = 7\frac{12}{35}$

(4) $\frac{83}{15} = 5\frac{8}{15}$ (5) $\frac{137}{14} = 9\frac{11}{14}$ (6) $\frac{17}{9} = 1\frac{8}{9}$

[B] (1) $= \frac{3 \times 3 + 1}{3} - \frac{4 \times 1 + 1}{4}$
 $= \frac{10}{3} - \frac{5}{4} = \frac{10 \times 4}{3 \times 4} - \frac{5 \times 3}{4 \times 3}$
 $= \frac{40}{12} - \frac{15}{12} = \frac{40 - 15}{12}$

Ans. $\frac{25}{12} = 2\frac{1}{12}$

(2) $\frac{13}{6} = 2\frac{1}{6}$ (3) $\frac{41}{40} = 1\frac{1}{40}$ (4) $\frac{43}{10} = 4\frac{3}{10}$

(5) $\frac{58}{7} = 8 \frac{2}{7}$ (6) $\frac{7}{6}$ (7) $\frac{39}{36}$

(Text Book Practice Set - 10)

Q.5. (1) Length of one rope

$$= 5 \frac{1}{6} \text{ m} = \frac{5 \times 6 + 1}{6} = \frac{31}{6} \text{ m}$$

Length of another rope

$$= 3 \frac{1}{2} \text{ m} = \frac{3 \times 2 + 1}{2} = \frac{7}{2} \text{ m}$$

Total length of two ropes

$$= \frac{31}{6} \text{ m} + \frac{7}{2} \text{ m} = \frac{31}{6} \text{ m} + \frac{7 \times 3}{2 \times 3} \text{ m}$$

$$= \frac{31}{6} \text{ m} + \frac{21}{6} \text{ m} = \frac{31 + 21}{6} \text{ m}$$

$$= \frac{52}{6} \text{ m} = \frac{26}{3} \text{ m}$$

$$= 8 \frac{2}{3} \text{ m}$$

Ans. Hence, Priya has $8 \frac{2}{3}$ m rope in all.

(2) $2 \frac{3}{4}$ l of milk is left in the vessel.

(3) Sunil was left with ₹ $12 \frac{1}{8}$.

(4) Suyash and Ashish spent ₹ 192 on total sugar they bought.

(5) Aradhana planted Brinjals on $\frac{4}{15}$ plot.

(6) Water left in the tank is 340 litres.

(7) Together they ate $\frac{11}{12}$ of the chocolate.

(8) Ravi spent 4 hrs. to read both the subjects.

(Text Book Practice Set - 11)

Q.6. [A] (1) $5/6, 10/6$ (2) $3/5, 7/5$ (3) $3/7, 10/7$

[B] (1) $3/5, 6/5, 13/5$ (2) $3/4, 5/4, 9/4$

(Text Book Practice Set - 12)

Q.7. [A] (1) $\frac{7}{20}$ (2) $\frac{12}{35}$ (3) $\frac{20}{81}$ (4) $\frac{8}{77}$ (5) $\frac{7}{10}$

(6) $\frac{9}{8}$ (7) 1 (8) $\frac{9}{17}$ (9) 0 (10) $\frac{11}{2}$

[B] (1) Area of banana plantation is 6 acres.

(2) 1, 80, 000 soldiers are posted on the north eastern border.

(Text Book Practice Set - 13)

Q.8. [A] (a) $\frac{1}{7}$ (b) $\frac{3}{11}$ (c) $\frac{13}{5}$ (d) $\frac{1}{2}$ (e) $\frac{7}{6}$

[B] (1) $\frac{8}{3}$ (2) $\frac{10}{27}$ (3) $\frac{33}{35}$ (4) $\frac{77}{48}$

[C] (1) Each student cleaned $\frac{1}{750}$ part of Sevagram.

(2) The length of each piece of the rope is $1 \frac{1}{4}$ m.

(3) The cost of 1 kg of sugar is ₹ $6 \frac{1}{4}$.

5. Decimal Fractions

FORMATIVE EVALUATION

Unit Test

- Q.1. [A] (1) 2.2 (2) 1000 (3) 0.18 (4) 3.06 (5) $\frac{4892}{100}$
 [B] (1)-(c), (2)-(e), (3)-(d), (4)-(a), (5)-(b)

Questionnaire

- Q.1. [A] (1)-(b); (2)-(c); (3)-(c); (4)-(c); (5)-(a)

(Text Book Practice Set - 14)

[B] (1)
$$\begin{array}{r} 905.500 \\ + 027.197 \\ \hline 932.697 \end{array}$$

- (2) 739.65 (3) 70.151 (4) 36.52
 (5) 48.382 (6) 159.948

[C] (1)
$$\begin{array}{r} 85.960 \\ - 02.345 \\ \hline 83.615 \end{array}$$

- (2) 534.79 (3) 182.819 (4) 456.936
 (5) 174.66 (6) 26.69

Oral Questions

- Q.1. [A] (1) 5.7 (2) 0.57 (3) 0.057 (4) 0.57 (5) 0.057
 [B] (1)-(c), (2)-(d), (3)-(a), (4)-(b), (5)-(f)

(Text Book Practice Set - 14)

[C] (1)

Place	Hundreds	Tens	Units	Tenths	Hundredths	Thousandths
	100	10	1	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$
Digit	3	7	8	0	2	5
Place Value	300	70	8	$\frac{0}{10} = 0$	$\frac{2}{100} = 0.02$	$\frac{5}{1000} = 0.005$

(2)

Digit	Place Value
8	80
5	5
6	0.6
3	0.03

(Text Book Practice Set - 15)

[D] (1) $\frac{3}{5} = \frac{3 \times \boxed{2}}{5 \times \boxed{2}} = \frac{\boxed{6}}{10} = \boxed{0.6}$

(2) $\frac{25}{8} = \frac{25 \times \boxed{125}}{8 \times \boxed{125}} = \frac{\boxed{3125}}{1000} = \boxed{3.125}$

(3) $\frac{21}{2} = \frac{21 \times \boxed{5}}{2 \times \boxed{5}} = \frac{\boxed{105}}{10} = \boxed{10.5}$

(4) $\frac{22}{40} = \frac{11}{20} = \frac{11 \times \boxed{5}}{20 \times \boxed{5}} = \frac{\boxed{55}}{100} = \boxed{0.55}$

- [E] (1) 0.75 (2) 0.8 (3) 1.125 (4) 0.85 (5) 0.9
 (6) 0.28 (7) 0.095 (8) 1.5 (9) 0.015 (10) 1.5

- [F] (1) $\frac{275}{10}$ (2) $\frac{908}{10}$ (3) $\frac{3915}{100}$
 (4) $\frac{312}{100}$ (5) $\frac{704}{10}$ (6) $\frac{7}{1000}$

SUMMATIVE EVALUATION

Semester Examination

Subjective Type

(Text Book Practice set - 16)

Q.1. [A] (1)

$$\begin{array}{r} 2.7 \\ \times 1.4 \\ \hline 108 \\ + 270 \\ \hline 3.78 \end{array}$$

- (2) 24.063 (3) 1.14 (4) 3.528
 (5) 1522.6624 (6) 7.5276 (7) 3278.1001
 (8) 91.480 (9) 8271.15 (10) 39.9300
 (11) 14.265 (12) 10.9151

- (B) (1) No. of rice bags = 18

Each bag weighs = 5.250 kg

He bought altogether rice = 18×5.250 kg

$$\begin{array}{r} 5.250 \\ \times 18 \\ \hline 42000 \\ + 52500 \\ \hline 94.500 \text{ kg.} \end{array}$$

\therefore If rice costs ₹ 42 per kg

\therefore Total rice = 94.500 kg
 Total he paid for rice = 94.500×42

$$\begin{array}{r} 94.500 \\ \times 42 \\ \hline 189000 \\ + 3780000 \\ \hline 3969.000 \end{array}$$

Ans: Total he paid for 94.500 kg rice is ₹ 3969.

- (2) Cloth left over with Vedika is 2 m 25 cm.
 (3) The cost of 8 rings is 1804.80
 (4) The car can cover a distance of 2812.5 km in 125 litres of petrol.
 (5) Total thickness of 12 sheets of paper is 25.92 mm.
 (6) The cost of 8 frocks is ₹ 2564.80
 (7) He should get ₹ 3025 for selling 50 litres of milk.
 (8) Total cost of 9 pens is ₹ 726.75
 (9) The cost of 5 T.V. sets is ₹ 2,25,003.
 (10) The cost of 43 m of cloth is ₹ 2702.55.

(Text Book Practice Set - 17)

Q.2. [A] (1) $= \frac{48}{10} \div 2$
 $= \frac{48}{10} \times \frac{1}{2}$
 $= \frac{24}{10}$
 2.4

- (2) 3.5 (3) 10.3 (4) 1.3 (5) 0.78 (6) 184.72

[B] (1) Length of a road = 4 km 800 m
 = 4000 m + 800 m
 = 4800 m

Trees are planted on both the sides at intervals of = 9.6 m

∴ No. of trees planted = $4800 \div 9.6$
 = $48000 \div 96$

$$\begin{array}{r} 500 \\ 96 \overline{) 48000} \\ \underline{- 480} \\ 0000 \\ \underline{- 0} \\ 00 \\ \underline{- 00} \\ 00 \end{array}$$

- ∴ 500 trees on one side & 500 trees on other side.
 ∴ 1000 trees planted.

Ans. Hence, there were 1000 trees planted.

- (2)** Pradnya walks 0.425 km in one round.
(3) Cost of 1 kg hirada is ₹ 380.
(4) Distance covered by the train in 1 hour is 46.4 km.
(5) The boat covers a distance of 12.93 km in 1 hour.

(Text Book Practice Set - 14)

[C] (1) Travelled by a bus = 42 km 365 m = 42.365
 Travelled by a car = 12 km 460 m = 12.460
 ∴ Travelled by walking = 640 m = 0.640

He travelled altogether

$$\begin{array}{r} \text{Km} \quad \text{m} \\ 42.365 \\ + \quad 12.460 \\ + \quad 00.640 \\ \hline 55.465 \end{array}$$

Ans. Hence, Avinash altogether travelled 55 km 465 m.

- (2)** Ayesha must pay ₹ 486 to the shopkeeper for 4.05 m cloth.
(3) Sujata has 2.500 kg watermelon left.
(4) Anita should reduce her speed by 30.6 km to be within the speed limit.

6. Bar Graphs

FORMATIVE EVALUATION

Unit Test

- Q.1. [A] (1)** column graph **(2)** X **(3)** Y
(4) Origin **(5)** 1
- [B] (1)** False. The horizontal line on the graph paper is called X-axis.
(2) False. On the graph paper vertical and horizontal lines at a distance of 1 cm are drawn in bold.
(3) True.
(4) True.
(5) False. The point of intersection of X-axis and Y-axis is called origin.

Questionnaire

Q.1. [A] (1) equal (2) same (3) Y (4) X (5) 1

Quiz

Q.1. [A] (1) Graph paper (2) X (3) 1 (4) 1 (5) Y

[B] (1) Right (2) Right (3) Right
(4) Wrong (5) Right

Orals

Q.1. (a) 2007 (b) 2006 (c) 50 (d) 20 (e) 10

Q.2. Height (in cm) 1991 → 4.5 cm, 2001 → 6 cm, 2011 → 7.5 cm

SUMMATIVE EVALUATION

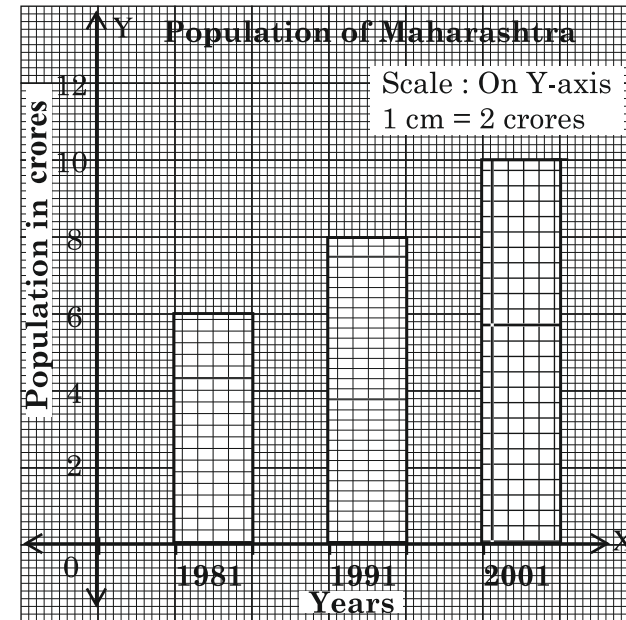
Semester Examination

Objective Type

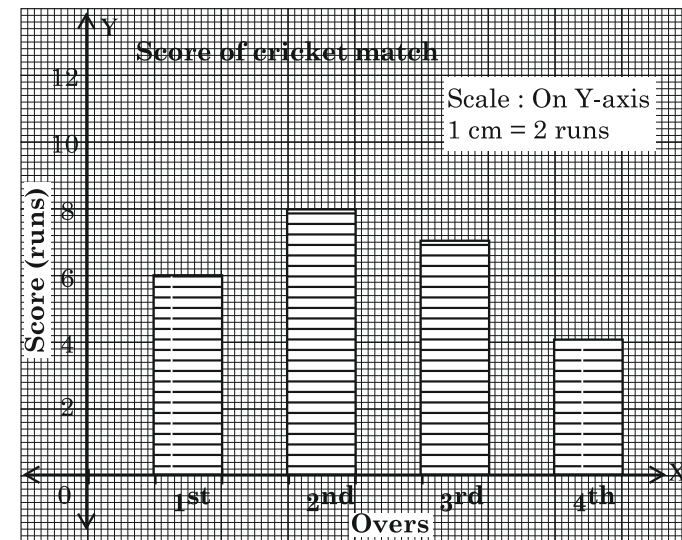
Q.1. (1) horizontal (2) widths (3) distances (4) variable

Long Answer Type

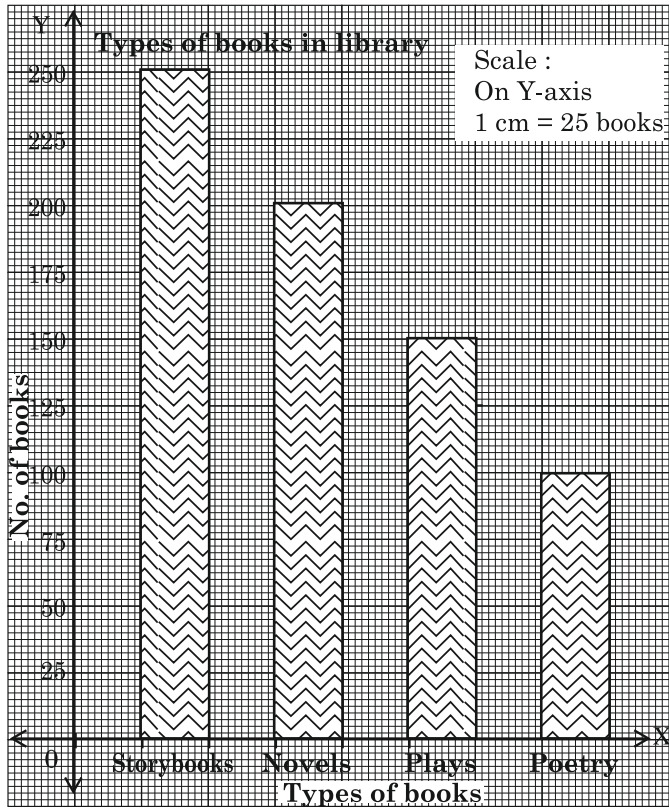
1. (1)



(2)



(3)

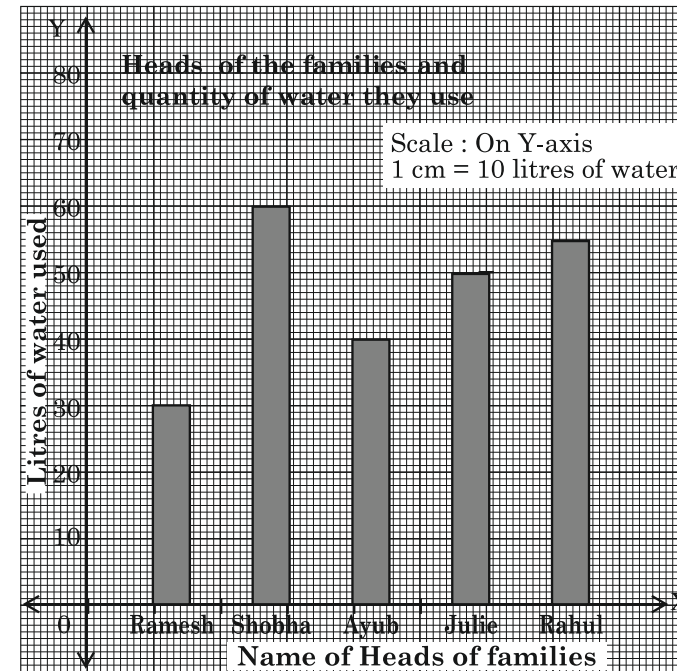


(Text Book Practice Set - 18)

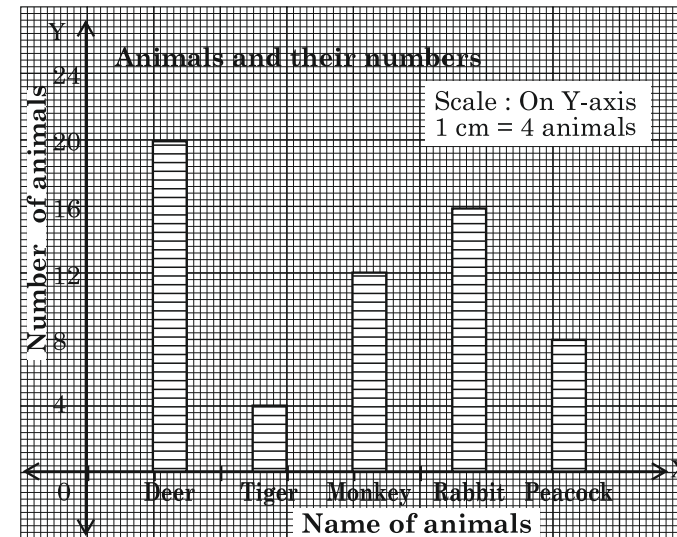
- (4) (a) Vertical line → Temperatures of different cities are shown
Horizontal line → Name of cities are shown
- (b) Chandrapur city had the highest temperature.
- (c) Pune and Nashik had equal maximum temperatures.
- (d) Panchgani and Matheran had a maximum temperature of 25°C .
- (e) The difference between the maximum temperatures of Panchgani and Chandrapur is 10°C .

(Text Book Practice Set - 19)

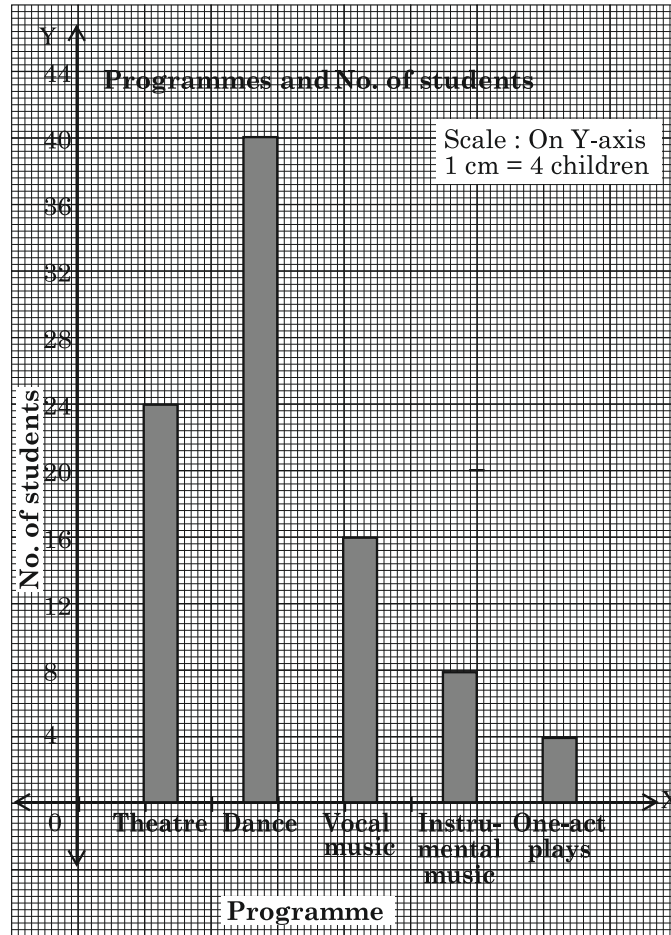
(1)



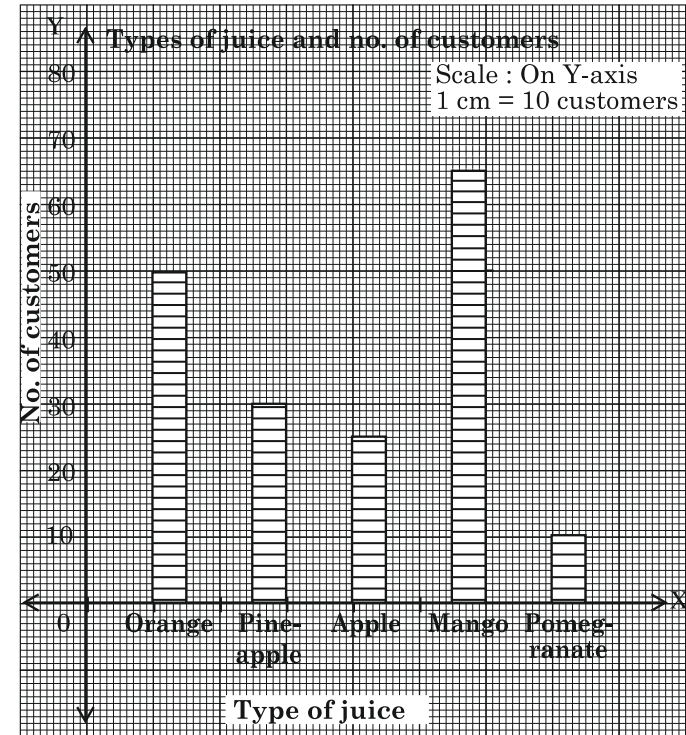
(2)



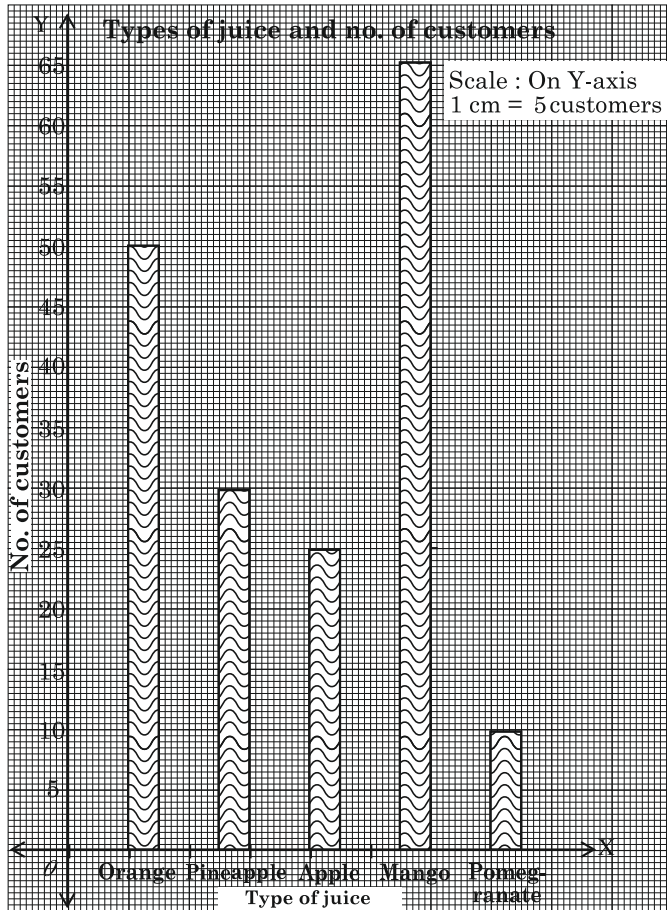
(3)



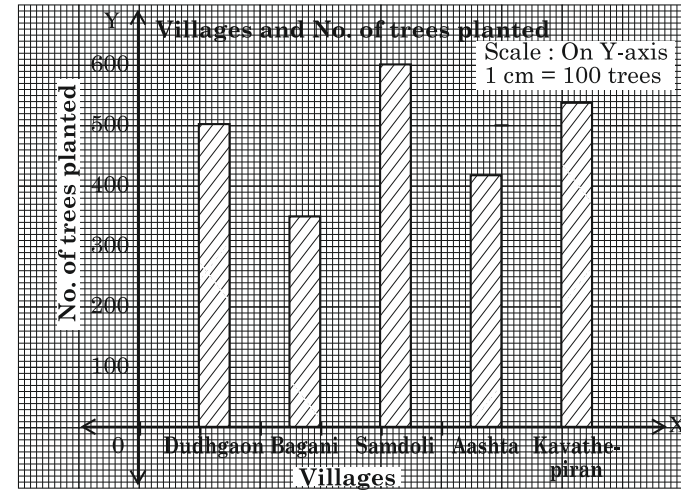
(4) (a)



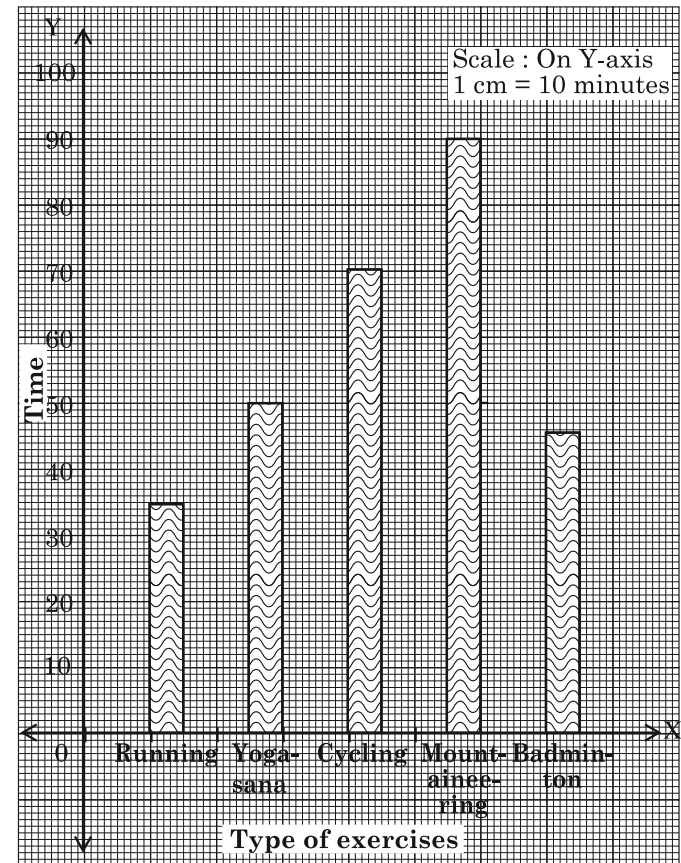
(4) (b)



(5)



(6)



7. Symmetry

FORMATIVE EVALUATION

Unit Test

- Q.1. [A]** (1) reflective symmetry (2) Symmetric (3) one
(4) no (5) 4
- [B]** (1) False. Symmetric figures lie exactly on one another.
(2) False. A rectangle has two lines of symmetry.
(3) False. A parallelogram has no line of symmetry.
(4) True.
(5) False. A letter 'Z' has no line of symmetry.
- [C]** (1) → (e), (2) → (d), (3) → (a), (4) → (b), (5) → (c).

Questionnaire

- Q.1. [A]** (1) → (c), (2) → (c), (3) → (b), (4) → (c), (5) → (b).
- [B]** (1) Infinite (2) 4 (3) None

Orals

- Q.1.** (1) one (2) two (3) none (4) two (5) one

SUMMATIVE EVALUATION

Semester Examination

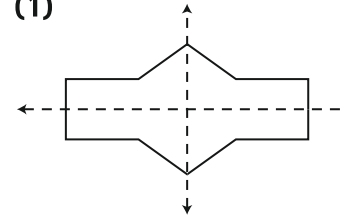
Objective Type

- Q.1.** (1) True (2) False (3) True (4) True (5) False

Subjective Type

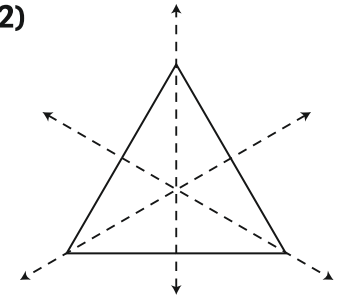
(Text Book Practice Set 20)

Q.1. (1)



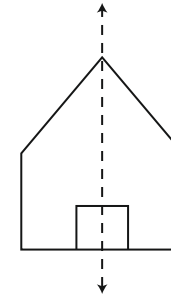
2 axes of symmetry

(2)



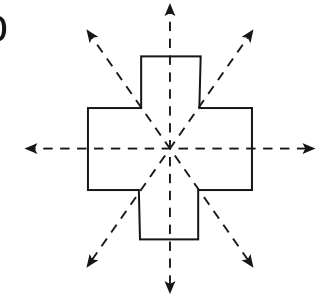
3 axes of symmetry

(3)



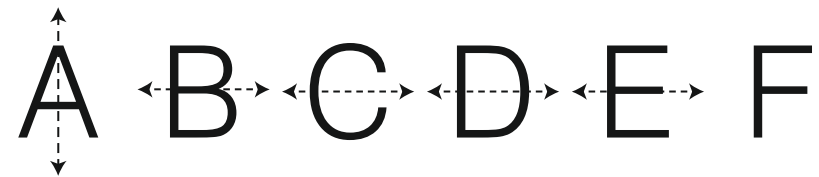
1 axis of symmetry

(4)



4 axes of symmetry

Q.2.



1 axis of symmetry

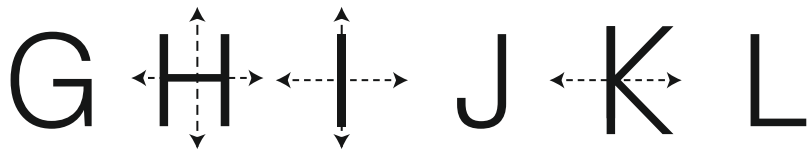
1 axis of symmetry

1 axis of symmetry

1 axis of symmetry

1 axis of symmetry

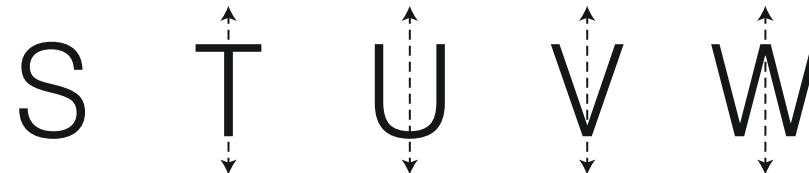
None



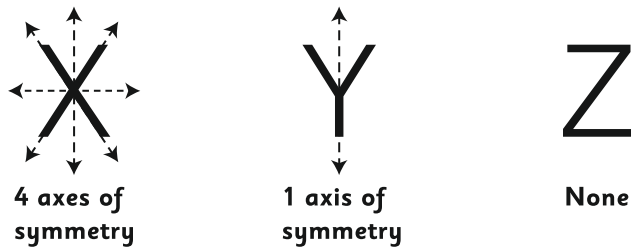
None 2 axes of symmetry 2 axes of symmetry None 1 axis of symmetry None



1 axis of symmetry None Infinite axes of symmetry None None None

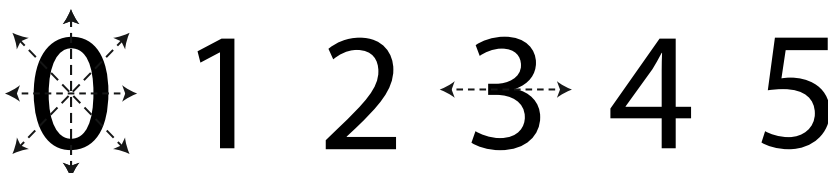


None symmetry 1 axis of symmetry 1 axis of symmetry 1 axis of symmetry 1 axis of symmetry



4 axes of symmetry 1 axis of symmetry None

Q.3.

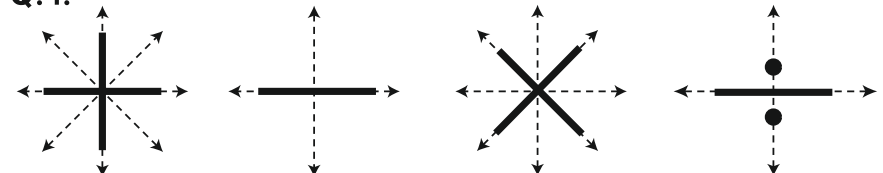


Infinite axes of symmetry None None 1 axis of symmetry None None



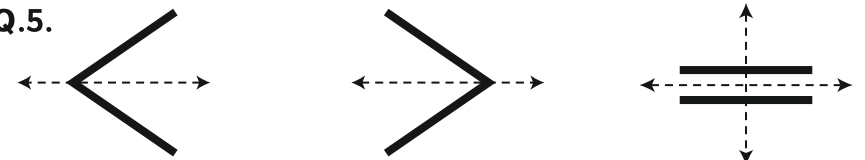
None None 2 axes of symmetry None

Q.4.



4 axes of symmetry 2 axes of symmetry 4 axes of symmetry 2 axes of symmetry

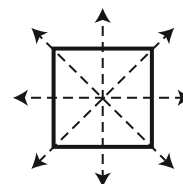
Q.5.



1 axis of symmetry 1 axis of symmetry 2 axes of symmetry

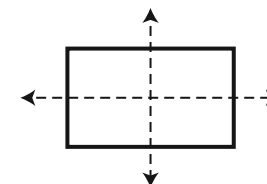
Q.6.

(1) Square



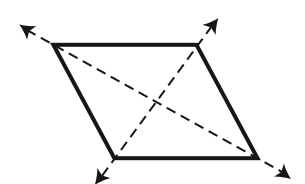
4 axes of symmetry

(2) Rectangle



2 axes of symmetry

(3) Rhombus



2 axes of symmetry

(4) Kite



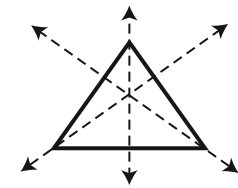
1 axis of symmetry

(5) Parallelogram



None

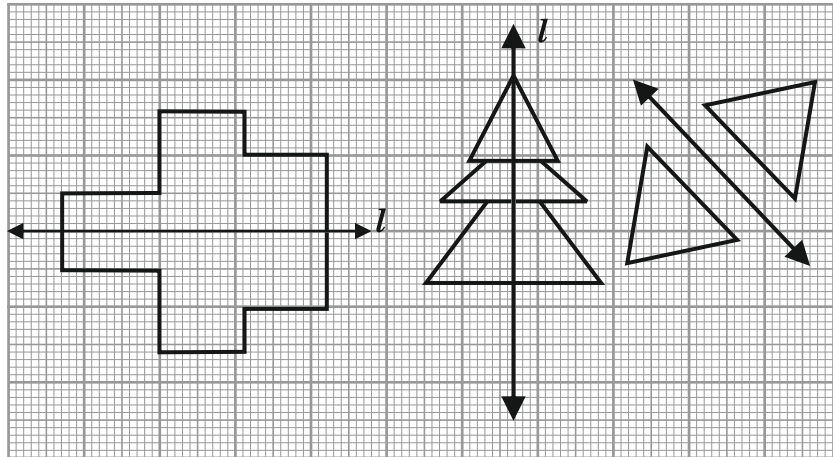
(6) Equilateral Triangle



3 axes of symmetry

(Text Book Practice Set - 21)

Q.7.



8. Divisibility

FORMATIVE EVALUATION

Unit Test

- Q.1. [A] (1) divisible (2) 4 (3) 18 (4) 135 (5) 5
- [B] (1) False. $2121 (2 + 1 + 2 + 1 = 6)$ is completely divisible by 3.
- (2) False. 1416 is completely divisible by 3 and 4.
- (3) True.
- (4) False. A number which has either 0 or 5 in its units place is divisible by 5.
- (5) True.
- [C] (1) \rightarrow (e), (2) \rightarrow (d), (3) \rightarrow (a), (4) \rightarrow (b), (5) \rightarrow (c).

Questionnaire

- Q.1. [A] (1) 2 (2) sum (3) tens, units (4) 9 (5) 5
- [B] (1) wrong (2) wrong (3) right
- (4) right (5) wrong

Oral

- Q.1. [A] (1) 68, 122 (2) 536, 832 (3) 100, 55
- (4) 99, 918 (5) 510, 1320 (6) 33, 453
- (7) 1444, 516 (8) 510, 20

SUMMATIVE EVALUATION

Semester Examination

Subjective Type

Q.1.

Number	Sum of digits in the number	Is the sum divisible by 3?	Is the given no. divisible by 3?
63	$6 + 3 = 9$	✓	✓
872	$8 + 7 + 2 = 17$	×	×
91	$9 + 1 = 10$	×	×
552	$5 + 5 + 2 = 12$	✓	✓
9336	$9 + 3 + 3 + 6 = 21$	✓	✓
4527	$4 + 5 + 2 + 7 = 18$	✓	✓

Q.2.

Number	Divide the number by 4. Is it completely divisible?	The number formed by the digits in the tens & units places	Is this number divisible by 4?
992	✓	92	✓
7314	×	14	×
6448	✓	48	✓
8116	✓	16	✓
7773	×	73	×
3024	✓	24	✓

Q.3.

Number	Divide the number by 9. Is it completely divisible?	Sum of the digits in the number	Is the sum divisible by 9?
1980	✓	$1 + 9 + 8 + 0 = 18$	✓
2999	×	$2 + 9 + 9 + 9 = 29$	×
5004	✓	$5 + 0 + 0 + 4 = 9$	✓
13389	×	$1 + 3 + 3 + 8 + 9 = 24$	×
7578	✓	$7 + 5 + 7 + 8 = 27$	✓
69993	✓	$6 + 9 + 9 + 9 + 3 = 36$	✓

Q.4.

Sr. No.	No.	Analysis	Divisible by	Not divisible by
(1)	495	(a) Units place is 5 (b) $4 + 9 + 5 = 18$	5 3, 9	2, 10
(2)	711	(a) Units place is 1 (b) $7 + 1 + 1 = 9$ (c) Last two digits are 11	3, 9	2, 5, 10 4
(3)	135	(a) Units place is 5 (b) $1 + 3 + 5 = 9$ (c) Last two digits are 35	5 3, 9	2, 10 4
(4)	88	(a) Units place is 8 (b) $8 + 8 = 16$ (c) Last two digits are 88	2, 4	3, 5, 9, 10
(5)	4203	(a) Units place is 3 (b) $4 + 2 + 0 + 3 = 9$ (c) Last two digits are 03	3, 9	2, 5, 10 4
(6)	43	(a) Units place is 3 (b) $4 + 3 = 7$ (c) Last two digits are 43		2, 3, 4, 5, 9, 10
(7)	24680	(a) Units place is 0 (b) $2 + 4 + 6 + 8 + 0 = 20$ (c) Last two digits are 80	2, 5, 10 4	3, 9

Q.5.

Sr. No.	Numbers	Divisibility test for					
		2	3	4	5	9	10
1	2354	✓	×	×	×	×	×
2	600	✓	✓	✓	✓	×	✓
3	516	✓	✓	✓	×	×	×
4	1305	×	✓	×	✓	✓	×
5	90300	✓	✓	✓	✓	×	✓
6	16038	✓	✓	×	×	✓	×
7	2304	✓	✓	✓	×	✓	×
8	504	✓	✓	✓	×	✓	×
9	616	✓	×	✓	×	×	×
10	165	×	✓	×	✓	×	×

Q.6. Numbers divisible by 2 → 4522, 6394, 800, 16, 8526.

Q.7. Numbers divisible by 5 → 1005, 240, 10, 18640, 555, 1890.

Q.8. Numbers divisible by 3 → 600, 516, 1305, 90300, 2304, 504.

Q.9. Numbers divisible by 4 → 520, 2404, 816, 6060.

Q.10. Numbers divisible by 9 → 1305, 38016, 4032, 405.

Q.11. Numbers divisible by 10 → 300, 8000, 900, 10.

Q.12. (Text Book Practice Set 22)

(a) No. of flowers with a girl having basket no. 3 → 111, 345, 249, 666, 123

Total flowers = 05

(b) No. of flowers with a boy having basket no. 4 → 356, 220, 960, 432, 336, 108

Total flowers = 06

(c) No. of flowers with a girl having basket no 9 → 369, 450, 999, 72, 90

Total flowers = 05

- Q.13.** (1) 2, 3 (2) 3, 5 (3) 2, 3, 9 (4) 2, 4
(5) 3, 5, 9 (6) 5 (7) 2, 4, 5, 10 (8) 3, 9
(9) 2, 5, 10 (10) 2, 4, 5, 10

9. HCF - LCM

FORMATIVE EVALUATION

Unit Test

Q.1. [A] (1) 18 (2) 15 (3) 8 (4) 1 (5) GCD

[B] (1) → (e), (2) → (d), (3) → (a), (4) → (b), (5) → (c).

[C] (1) True (2) False (3) False (4) True (5) True

Q.2. [A] (1) Divisors of 6 = 1, 2, 3, 6

Divisors of 8 = 1, 2, 4, 8

Common divisors = 1, 2

Biggest common divisor = 2

∴ HCF = 2

HCF of 6 and 8 is 2

(2) HCF of 9 and 12 is 3

(3) HCF of 6, 12, 18 is 6

(4) HCF of 15, 30 and 45 is 15

(5) HCF of 10, 20 and 30 is 10

(Text Book Practice Set 23)

- [B] (1)** Factors of 12 = 1, 2, 3, 4, 6, 12
Factors of 16 = 1, 2, 4, 8, 16
Common factors = 1, 2, 4
- (2)** Common factors = 1, 3
- (3)** Common factors = 1, 5
- (4)** Common factor = 1
- (5)** Common factors = 1, 2, 4, 8

(Text Book Practice Set 24)

- [C] (1)** Divisors of 45 = 1, 3, 5, 9, 15, 45
Divisors of 30 = 1, 2, 3, 5, 6, 10, 15, 30
Common divisors = 1, 3, 5, 15
Biggest common divisor = 15
 \therefore HCF = 15

- Ans.:** HCF of 45 and 30 is 15
- (2)** HCF of 120 and 144 is 24
- (3)** HCF of 81 and 99 is 9
- (4)** HCF of 24 and 36 is 12
- (5)** HCF of 25 and 75 is 25
- (6)** HCF of 48 and 54 is 6
- (7)** HCF of 150 and 225 is 75
- (8)** HCF of 16 and 48 is 16
- (9)** HCF of 39 and 25 is 1
- (10)** HCF of 49 and 56 is 7

- Q.3. [A] (1)** LCM = $9 \times 7 = 63$ **(2)** 44 **(3)** 210
(4) 15 **(5)** 21

(Text Book Practice Set 25)

- [B] (1)** Multiples of 9
= 9, 18, 27, 36, 45, 54, 63, 72, 81, 90
Multiples of 15 = 15, 30, 45, 60, 75, 90
Common multiples = 45, 90,
 \therefore LCM = 45
LCM of 9 and 15 is 45
- (2)** LCM of 2, 3 and 5 is 30
- (3)** LCM of 12 and 28 is 84
- (4)** LCM of 15 and 20 is 60
- (5)** LCM of 8 and 11 is 88
- (6)** LCM of 65 and 39 is 195
- [C] (1)** Multiple of 6 = 6, 12, 18, 24,
Multiple of 8 = 8, 16, 24, 32,
Common multiple = 24
 \therefore LCM = 24
- (2)** LCM of 15 and 20 is 60
- (3)** LCM of 28, 72 and 98 is 3528
- (4)** LCM of 65 and 39 is 195
- (5)** LCM of 45 and 36 is 180
- (6)** LCM of 165 and 90 is 990

Q.4.	Numbers	HCF	LCM
(1)	250, 150	50	750
(2)	96, 192	96	192
(3)	32, 37	1	1184
(4)	132, 88	44	264
(5)	46, 51, 35	1	82110

Long Answer Type

(Text Book Practice Set - 24)

Q.1. [A] (1) The length of each bed is a factor of 18 and 15. Besides, the maximum possible length of each bed is HCF of 18 and 15.

Factors of 18 = 1, 2, 3, 6, 9, 18

Factors of 15 = 1, 3, 5, 15

C.F. = 1, 3 out of which 3 is the greatest .

∴ HCF = 3

Ans.: The maximum length of each bed is 3 metres.

(2) The maximum possible length of each piece is 4 metres.

(3) (a) The maximum weight of each bag is 90 kg.

(b) Bags of basmati rice = $2610 \div 90 = 29$ bags

Bags of Indrayani rice = $1980 \div 90 = 22$ bags

(4) (a) Maximum number of students there can be in each group is 28.

(b) Each group should have the maximum possible number of students so as to minimize the total amount paid to guide.

(Text Book Practice Set 25)

[B] (1) Least number of children in school can be counted by LCM of 20 and 25.

Multiples of 20 = 20, 40, 60, 80, 100, ...

Multiples of 25 = 25, 50, 75, 100, ...

Common multiples = 100, ...

LCM = 100

Ans.: Least number of children in school is 100.

(2) Veena must have atleast 240 beads.

(3) The minimum number of laddoos in the three boxes altogether was 360.

(4) All three signals turn green simultaneously again after 120 seconds.

(5) The equivalent fractions are $\frac{65}{225}$ and $\frac{66}{225}$ and the sum is $\frac{131}{225}$.

Part Two
10. Equations

FORMATIVE EVALUATION

Unit Test

- Q.1. [A]** (1)-(d) (2)-(a) (3)-(b) (4)-(c)
- [B]** (1) equality (2) multiplied (3) added
(4) subtracted (5) divided
- [C]** (1) Equation (2) Equality (3) Equality
(4) Equation (5) Equation

(Text Book Practice Set - 26)

- [D]** (a) 8 (b) 10 (c) 13 (d) 24 (e) 9
(f) 24 (g) 9 (h) 8 (i) 10 (j) 13

Questionnaire

- [A]** Proper statement (=): 1, 2, 5, 6
Improper statement (x): 3, 4

(Text Book Practice Set - 27)

- [B]** (1) $x + 3$ (2) $x - 11$ (3) $x \times 15$ (4) $4x = 24$
(5) $x + 9$ (6) $x \times 20$ (7) $6x = 60$ (8) $3x = 24$
(9) $x - 15 = 25$ (10) $\frac{x}{8} = 2$
- [C]** (1) Equation (2) Equality (3) Equality
(4) Equation (5) Equation (6) Equality
- [D]** (1) Right (2) Right (3) Wrong
(4) Wrong (5) Right

Quiz

(Text Book Practice Set - 27)

- Q.1. [A]** (1) Subtraction (2) Addition
(3) Division (4) Multiplication

[B]

Sr. No.	1	2	3
1	2	5	1
2	1	1	6
3	1	0	0

- [C]** (1) True (2) False (3) False (4) True (5) True
[D] (1) No (2) Yes (3) Yes (4) No

Oral

- Q.3. [A]** (1) 1 (2) 2 (3) 5 (4) 2 (5) 1
- [B]** (1) Subtraction property of an equality
(2) Addition property of an equality
(3) Division property of an equality
(4) Multiplication property of an equality
(5) Subtraction property of an equality
- [C]** (a) Solution (b) Not the solution (c) Solution
(d) Not the solution (e) Solution
- [D]** (1) If $x = 1$, then $1 + 5 = 6$
 $x = 2$, then $2 + 5 = 7$
 $x = 3$, then $3 + 5 = 8$
 $x = 4$, then $4 + 5 = 9$
 $\therefore x = 4$ is the solution of the equation

- (2) $x = 12$ is the solution of the equation $x - 9 = 3$
 (3) $x = 6$ is the solution of the equation $\frac{x}{3} = 2$
 (4) $x = 5$ is the solution of the equation $4x = 20$

SUMMATIVE EVALUATION

Semester Examination

Objective Type

- Q.1.** (1) solution (2) 0 (3) added
 (4) subtracted (5) divided
- Q.2.** (1) Equation (2) Not an equation (3) Not an equation
 (4) Equation (5) Equation

Subjective Type

- Q.1.** (1) $10 - 2 = 8$; $4 \times 2 = 8$
 $\therefore 10 - 2 = 4 \times 2$
 (2) = (3) \neq (4) = (5) \neq (6) \neq (7) = (8) =
- Q.2.** (1) Multiplication property of an equality
 (2) Addition property of an equality
 (3) Division property of an equality
 (4) Subtraction property of an equality
 (5) Multiplication property of an equality
 (6) Subtraction property of an equality
- Q.3.** (1) Equation (2) Equation (3) Equality (4) Equation
 (5) Equation (6) Equality (7) Equation (8) Equality
- Q.4.** (1) $5a = 16$ (8)
 LHS = $5a = 5(8) = 40$
 RHS = 16

- \therefore LHS \neq RHS
 \therefore 8 is not the solution of the equation
 (2) 7 is the solution of the equation
 (3) 7 is not the solution of the equation.
 (4) 4 is the solution of the equation.
 (5) 2 is not the solution of the equation.
 (6) 0 is the solution of the equation.
 (7) 5 is the solution of the equation.
 (8) 3 is not the solution of the equation.

(Text Book Practice Set - 27)

- Q.5.** (1) $y - 5 + 5 = 1 + 5$
 $y + 0 = 6$
 $y = 6$
 (2) $t = 3$ (3) $x = 13$ (4) $m = 23$ (5) $p = 36$
 (6) $x = -5$ (7) $m = -7$ (8) $p = -5$ (9) $u = 6$
 (10) $k = 8$ (11) $n = 12$ (12) $y = 60$
- Q.6.** (1) 5 (2) multiplied (3) equal (4) 6
- Q.7.** (1) Let Haraba own 'x' sheep at first.
 He sold 34 sheep in the market.
 He still has 176 sheep with him.
 $\therefore x - 34 = 176$
 $x - 34 + 34 = 176 + 34$
 $\therefore x + 0 = 210$
 $\therefore x = 210$
 At first Haraba had 210 sheep.

- (2) Sakshi made 19 bottles of jam and total weight of the jam was 4 kg. 750 gm.
 (3) Altogether Archana had bought 50 kg. of wheat.
 (4) Altogether Ravi had bought 60 mangoes.
 (5) I had 50 chocolates with me.
 (6) The other number will be 12.

11. Ratio – Proportion

FORMATIVE EVALUATION

Unit Test

Q.1. [A]

Sr. No.	Numbers	Ratio of first number to second number	Division form
1	17, 12	17 : 12	$\frac{17}{12}$
2	13, 19	13 : 19	$\frac{13}{19}$
3	5, 9	5 : 9	$\frac{5}{9}$
4	22, 20	22 : 20	$\frac{22}{20}$
5	9, 15	9 : 15	$\frac{9}{15}$

[B]

Sr. No.	Numbers	Ratio of second number to first number	Division form
1	18, 11	11 : 18	$\frac{11}{18}$
2	12, 21	21 : 12	$\frac{21}{12}$

3	4, 7	7 : 4	$\frac{7}{4}$
4	32, 20	20 : 32	$\frac{20}{32}$
5	9, 25	25 : 9	$\frac{9}{25}$

(Text Book Practice Set 28)

Q.2. (1) $\frac{24}{56} = \frac{12}{28} = \frac{6}{14} = \frac{3}{7}$ **Ans.** 3 : 7

(2) 9 : 7 (3) 4 : 5 (4) 7 : 5 (5) 7 : 13 (6) 11 : 9

Q.3. (1) $\frac{25 \text{ Beads}}{40 \text{ Beads}} = \frac{5}{8}$ **Ans.** 5 : 8

(2) 1 : 3 (3) 1 : 4 (4) 5 : 4 (5) 9 : 4 (6) 4 : 1

(7) 3 : 5 (8) 3 : 2 (9) 5 : 4

Q.4. (1) $\frac{24}{8} = \frac{24 \div 8}{8 \div 8} = \frac{3}{1}$ **Ans.** 3 : 1

(2) 3 : 7 (3) 3 : 1 (4) 5 : 6 (5) 8 : 7 (6) 3 : 2

Questionnaire

Q.1. [A] (1) $\frac{8}{22} = \frac{4}{11} = 4 : 11$

(2) 3 : 5 (3) 1 : 3 (4) 1 : 5 (5) 9 : 11

[B] (1)-(e), (2)-(d), (3) (a), (4)-(c), (5)-(b).

[C] (1) $\frac{15}{12} = \frac{x}{8}$

$\therefore x = \frac{8 \times 15}{12}$

$\therefore x = 10$

- (2) $x = 8$ (3) $x = 20$ (4) $x = 24$ (5) $x = 12$

Quiz

- Q.1.** (1) 10 : 7 (2) 1 : 6 (3) 3 : 8 (4) 5 : 3 (5) 1 : 4

Oral

- Q.1.** (1) 9 is to 7 (2) 3 is to 8 (3) 20 is to 10
(4) 5 is to 7 (5) 15 is to 61

Class Assignment

- Q.1.** (1) 10 mins = $10 \times 60 = 600$ secs
 \therefore 10 mins 30 secs = $600 + 30 = 630$ secs
 15 mins = $15 \times 60 = 900$ secs
 \therefore Ratio = $\frac{900 \text{ secs}}{630 \text{ secs}} = \frac{10}{7} = 10 : 7$

- (2) 1 : 6 (3) 40 : 3

- Q.2.** (1) ₹ 2 = $2 \times 100 = 200$ ps
 \therefore Ratio = $\frac{75 \text{ ps}}{200 \text{ ps}} = \frac{3}{8} = 3 : 8$

- (2) 5 : 1 (3) 5 : 3 (4) 1 : 4

(Text Book Practice Set 28)

- Q.3.** (1) Nikita's age = 28 years
 Vinit's age = 21 years
 \therefore Ratio = $\frac{28}{21} = \frac{4}{3} = 4 : 3$
 (2) 4 : 3 (3) 3 : 5 (4) 4 : 11
 (5) (1) 1 : 3 (2) 6 : 7 (3) 5 : 17 (6) 1 : 1

SUMMATIVE EVALUATION

Semester Examination

Objective Type

- Q.1. [A]** (1) $\frac{10}{9} = 10 : 9$ and $\frac{9}{10} = 9 : 10$

- (2) $\frac{7}{22} = 7 : 22$ and $\frac{22}{7} = 22 : 7$

- (3) $\frac{2}{5} = 2 : 5$ and $\frac{5}{2} = 5 : 2$

- (4) $\frac{7}{11} = 7 : 11$ and $\frac{11}{7} = 11 : 7$

- (5) $\frac{13}{17} = 13 : 17$ and $\frac{17}{13} = 17 : 13$

- (6) $\frac{18}{27} = 18 : 27$ and $\frac{27}{18} = 27 : 18$

- Q.1. [B]** (1) 7 is to 9 (2) 10 is to 6 (3) 30 is to 10
 (4) 5 is to 20 (5) 1 is to 4

Subjective Type

Short Answer Type

- Q.1.** (1) $15 : 6 = \frac{15}{6} = \frac{15 \div 3}{6 \div 3} = \frac{5}{2} = 5 : 2$

- (2) 1 : 3 (3) 5 : 9 (4) 2 : 5 (5) 2 : 1 (6) 1 : 5

- (7) 7 : 9 (8) 1 : 2 (9) 2 : 3 (10) 1 : 3

Long Answer Type

- Q.1.** Kamal's height = 140 cm

Alpa's height = 105 cm

\therefore Ratio = 140 : 105

$$= \frac{140}{105} = \frac{140 \div 5}{105 \div 5} = \frac{28}{21} = \frac{28 \div 7}{21 \div 7} = \frac{4}{3} = 4 : 3$$

Q.2. Cost of a pen to that of pencil = 5 : 3

Q.3. (1) 1 min = 60 seconds

$$\therefore \text{Ratio} = \frac{15}{60} = \frac{1}{4} = 1 : 4$$

(2) 9 : 10 **(3)** 5 : 3 **(4)** 1 : 2 **(5)** 5 : 3 **(6)** 1 : 4

Q.4. $\frac{\text{No. of dogs}}{\text{No. of cats}} = \frac{3}{7}$

$$\therefore \frac{\text{No. of dogs}}{28} = \frac{3}{7}$$

$$\therefore \text{No. of dogs} = \frac{3 \times 28}{7} = 3 \times 4$$

$$\text{No. of dogs} = 12$$

Q.5. The number of women is 240.

Q.6. The smaller number is 6.

Q.7. The cost of a chair is ₹75.

Q.8. Ram's weight is 25 kg.

Q.9. (1) $\frac{8}{12} = \frac{2}{x}$

$$\therefore x = \frac{2 \times 12}{8} = 3$$

(2) $x = 40$ **(3)** $x = 12$ **(4)** $x = 6$ **(5)** $x = 25$ **(6)** $x = 78$

(Text Book Practice Set 29)

Q.10. (1) Cost of 15 bananas = ₹ 45

$$\therefore \text{Cost of 1 banana} = ₹ 45 \div 15 = ₹ 3$$

$$\therefore \text{Cost of 1 banana} = ₹ 3$$

$$\therefore \text{Cost of 8 bananas} = 8 \times 3 = ₹ 24$$

Ans.: Cost of 8 bananas will be ₹ 24.

(2) Cost of 4 flowers will be ₹ 10.

(3) Cost of 16 metres cloth is ₹ 2880.

(4) Cost of 8 kg rice is ₹ 260.

(5) Cost of 12 chairs will be ₹ 5136.

(6) The weight of 1080 boxes is 216 kg.

(7) (a) The car travels 330 km in 6 hrs.

(b) In 8 hrs. the car will travel 440 km.

(8) To plough 19 acres of land the tractor will need 76 litres of diesel.

(9) 50 tonnes of sugarcane will yield 5600 kg. of sugar.

(10) 13 rows would have 208 mango trees.

(11) 4 ponds will be required to store 4,80,000 litres of water.

The cost of making 4 ponds will be ₹ 72,000.

(12) 17 tops will cost ₹ 85.

12. Percentage

FORMATIVE EVALUATION

Unit Test

- Q.1. [A]** (1) $\frac{7}{1000}$ (2) $\frac{85}{100}$ (3) $\frac{8}{10}$
 (4) $\frac{9}{100}$ (5) $\frac{600}{1000}$
- Q.2.** (1) 95 percent (2) 80 percent (3) 9 percent
 (4) 60 percent (5) 60 percent

Questionnaire

- Q.1.** (1) 50% (2) 50% (3) 70% (4) 50% (5) 79
- Q.2.** (1) True (2) True (3) False (4) False (5) True
- Q.3. [A]** (1) 60% (2) 30% (3) 1
- [B]** (1) $70 \times \frac{10}{100}$ (2) $840 \times \frac{5}{100}$ (3) $\frac{20}{100} \times 600$
 (4) $\frac{35}{100} \times 300$ (5) $\frac{14}{100} \times 275$
- [C]** (1) Right (2) Right (3) Wrong (4) Wrong

Quiz

	1	2	3
1	1	2	5
2	1	0	0
3	1	2	0

Oral

- Q.1. [A]** (1) 100 (2) 80 (3) 35 (4) 65 (5) %

- [B]** (1) 46% (2) 73% (3) 20% (4) 42% (5) 35%
- [C]** (1) True (2) False (3) False (4) False (5) True
- [D]** (1) $\frac{42}{60} \times 100$ **Ans.** 70%
 (2) 30 (3) 90% (4) 44% (5) 335
 (6) 75% (7) 525

SUMMATIVE EVALUATION

Semester Examination

Objective Type

- Q.1. [A]** (1) 4, 28 (2) 100 (3) 20, 160
 (4) 2, 80 (5) 3, 3, 16
- [B]** (1) False (2) True (3) False
 (4) True (5) False
- [C]** (1)-(d), (2)-(a), (3)-(e), (4)-(b), (5)-(c).

Orals

- Q.1.** (1) Use of '÷' instead 'x' (2) $\frac{69}{100}$ not $\frac{100}{69}$
 (3) 25 instead of 20 (4) Use of 'x' instead '÷'
- Q.2.** (1) 0.50, 50 percent (2) $\frac{10}{1000}$, 1 percent
 (3) $\frac{15}{100}$, 15 percent (4) $\frac{350}{1000}$, 35 percent
 (5) $\frac{34}{100}$, 0.34

Subjective Type**Short Answer Type**

- Q.1.** (1) 25 percent or 25% (2) 79 percent or 79%
 (3) 1 percent or 1% (4) 12 percent or 12%
 (5) 50 percent or 50% (6) 15 percent or 15%
 (7) 28 percent or 28%

- Q.2.** (1) $\frac{17}{100}$ (2) $\frac{55}{100}$ (3) $\frac{10}{100}$
 (4) $\frac{98}{100}$ (5) $\frac{32}{100}$ $\frac{44}{100}$

- Q.3.** (1) $\frac{7}{20} = \frac{7 \times 5}{20 \times 5} = \frac{35}{100}$ (35 percent or 35%)
 (2) $\frac{43}{50} = \frac{43 \times 2}{50 \times 2} = \frac{86}{100}$ (86 percent or 86%)
 (3) $\frac{21}{300} = \frac{21 \div 3}{300 \div 3} = \frac{7}{100}$ (7 percent or 7%)
 (4) $\frac{120}{500} = \frac{120 \div 5}{500 \div 5} = \frac{24}{100}$ (24 percent or 24%)
 (5) $\frac{29}{25} = \frac{29 \times 4}{25 \times 4} = \frac{116}{100}$ (116 percent or 116%)

- Q.4.** (1) $0.76 = \frac{76}{100}$ (76 percent or 76%)
 (2) $0.65 = \frac{65}{100}$ (65 percent or 65%)
 (3) $0.18 = \frac{18}{100}$ (18 percent or 18%)
 (4) $0.08 = \frac{8}{100}$ (8 percent or 8%)

- (5) $0.01 = \frac{1}{100}$ (1 percent or 1%)
 (6) $0.5 = 0.50 = \frac{50}{100}$ (50 percent or 50%)
 (7) $0.9 = 0.90 = \frac{90}{100}$ (90 percent or 90%)
 (8) $0.75 = \frac{75}{100}$ (75 percent or 75%)

Long Answer Type

Q.1. (1) $\frac{24}{50} = \frac{24 \times 2}{50 \times 2} = \frac{48}{100} = 48\%$

- (2) 64% (3) 144% (4) 65%
 (5) 8% (6) 80% (7) 30%

Q.2. (1) $\frac{50}{100} \times 84 = \frac{4200}{100} = 42$

- (2) 81 (3) 99 (4) 486 (5) 11 (6) 3

Q.3. (1) Shabana scored = 736 marks.

Total = 800 marks

$\therefore \frac{736}{800} \times 100 = 92\%$

Shabana scored 92% marks.

- (2) 70% of students can swim, 30% of students cannot swim
 (3) Prakash actually planted jowar on 14625 sq.m. of land.
 (4) Other messages besides, the greetings were 4.
 (5) There is 96% literacy in the village.
 (6) In Jambhulgaon, more women cast their votes than in Wadgaon.

- (7) In the postbox, there were 12% of greeting cards.
 (8) 59% of land was sowed with wheat.

13. Profit – Loss

FORMATIVE EVALUATION

Unit Test

- Q.1. [A]** (1) CP (2) SP (3) Selling Price
 (4) Profit (5) Loss
[B] (1) 450 (Loss) (2) 1,016 (Profit)
 (3) 23 (Loss) (4) 50 (Profit)

Questionnaire

- Q.1. [A]** (1) Profit (2) Loss (3) Profit (4) Loss

Orals

- Q.1.** (1) Loss (2) Profit (3) 125 (4) 125 (5) Profit (6) Loss

Home/Class Assignments

(Text Book Practice Set - 31)

- Q.1.** (1) Profit ₹ 500 (2) Loss ₹ 10 (3) Profit ₹ 99
 (4) Loss ₹ 80 (5) Profit ₹ 40 (6) Loss ₹ 50
 (7) Profit ₹ 45 (8) Loss ₹ 20 (9) Profit ₹ 820
 (10) Profit ₹ 150 (11) Loss ₹ 80
- Q.2.** The shopkeeper got profit of ₹ 400.
Q.3. Sunandabai got a profit of ₹ 225.
Q.4. The WSG made a profit of ₹ 7,050.
Q.5. Pramod made a loss of ₹ 50.

- Q.6.** Sharad made a loss of ₹ 200.
Q.7. Kantabai got a profit of ₹ 1,500.
Q.8. Magansheth made a profit of ₹ 45.

SUMMATIVE EVALUATION

Semester Examination

Subjective Type

(Text Book Practice Set 32)

- Q.1.** Total C.P. of the machine = ₹ 82,700; Profit = ₹ 17,300.
Q.2. Total C.P. = ₹ 1,52,600;
 SP of 35 mixer grinders = ₹ 1,73,600
 SP of 1 mixer grinder = ₹ 1,73,600 ÷ 35 = ₹ 4,960
 Javedbhai needs to sell each mixer grinder for ₹ 4,960 to get expected profit.
Q.3. Loss of ₹ 50
 Santosh got loss of ₹ 50.
Q.4. Total CP of goods = ₹ 57,000; Profit = ₹ 8,000
 In this transaction he will get profit of ₹ 8,000.
Q.5. In this transaction Ajit kaur got loss of ₹ 150.
Q.6. Total C.P. = ₹ 57,280; SP of 1 Pressure cooker = ₹ 941
 Kusumtai needs to sell each pressure cooker at ₹ 941 to achieve her expected profit.
Q.7. Total C.P. = ₹ 1,25,000
 SP of 1 refrigerator = ₹ 14,500
 In this transaction Indrajeet should sell each refrigerator for ₹ 14,500.

Q.8. Total C.P. of seeds = ₹ 26,160; Profit = ₹ 9,240
Lalitabai got profit of ₹ 9,240.

(Text Book Practice Set 33)

- Q.9. (1)** (a) C.P. of vegetables = ₹ 400
S.P. of vegetables = ₹ 650
Here, SP > CP
∴ $P = SP - CP = 650 - 400$
∴ $P = ₹ 250$
∴ $\%P = \frac{P}{C.P} \times 100 = \frac{250}{400} \times 100$
 $\%P = 62.5\%$
- (b) C.P. of fruits = ₹ 300
S.P. of fruits = ₹ 500
Here, SP > CP
∴ $P = SP - CP = 500 - 300$
∴ $P = ₹ 200$
∴ $\%P = \frac{P}{C.P} \times 100 = \frac{200}{300} \times 100$
 $\%P = 66.66\%$

Ans. Balbir's transaction is more beneficial.

- (2) Profit = ₹ 126; Percent profit = 15%
Seema got 15% profit in this transaction.
- (3) Transaction of shirt is more profitable.
- (4) Shyamrao's transaction is more profitable.
- (5) Profit = ₹ 100; Percent profit = 25%
Hanif got 25% profit in this transaction.

(Text Book Practice Set 34)

(6) 1. Problem : Rajesh made cotton shirts costing ₹ 1,600 and sold the same for ₹ 2,800. What was his profit or loss percent ?

Sol. : Since selling price was greater than cost price, he got a profit.

$$\begin{aligned} \text{Profit} &= \text{S.P.} - \text{C.P.} \\ &= ₹ 2,800 - ₹ 1,600 = ₹ 1,200 \end{aligned}$$

Let the profit be $x\%$

$$\text{then } \frac{x}{100} = \frac{1,200}{1,600}$$

$$\therefore \frac{x}{100} \times 100 = \frac{1,200}{1,600} \times 100$$

... (Multiply both the sides by 100)

$$\therefore x = 75$$

Ans. Rajesh's profit percent was 75.

2. Rahul's loss percent was 5.
3. Vandana's profit percent was 16.66%.
4. Shopkeeper's profit percent was 7.5%.
5. Nidhi got 11.11% profit.
6. The farmer's loss percent was 20.

14. Bank and Simple Interest

FORMATIVE EVALUATION

Unit Test

- Q.1. [A]** (1) principal (2) period (3) simple interest
(4) cent (5) period (6) current
(7) Fixed deposit (8) Recurring deposit (9) ATM
- [B]** (1) (a) ₹ 18,000 (b) 4 years
(c) $20,500 - 18,000 = ₹ 2,500$
(2) (a) 1 (b) 100 (c) 11

Questionnaire

- Q.1. (1)** False (2) False (3) True (4) True (5) True
- Q.2. (1)** (a) 2 years (b) interest (c) ₹ 1,500
(d) $\frac{1}{2}$ (e) 1,500 (f) $1,500 \times \frac{1}{2}$, ₹ 750
- (2) (a) 10 (b) 30 (c) 120
(d) $30 \times 120 = 3600$

Quiz

- Q.1. (1)** Principal, $\frac{1}{3}$, $\frac{1}{3}$ (2) 11 p.c.p.a.
(3) ₹ 1,000, period (4) 2
(5) Principal, period, rate of interest

Orals

- Q.1. (1)** (a) ₹ 44,000 (b) 3 years
(c) 46,000; 44,000; ₹ 2,000
- (2) (a) ₹ 11,000 (b) 12 p.c.p.a (c) 2, ₹ 1,320

Class Assignments

- Q.1. (1)** ₹ 68 (2) ₹ 3,600 (3) ₹ 136.5
Q.2. (1) ₹ 3,060 (2) ₹ 2,790

SUMMATIVE EVALUATION

Semester Examination

Objective Type

- Q.1. (1)** (a) 5 (b) ₹ 30 (c) 35 (d) 35 (e) ₹ 1,050

Subjective Type

Short Answer Type

- Q.1. (1)** Principal = ₹ 25,000
Period = 3 years
Interest = $32,500 - 25,000 = ₹ 7,500$
- (2) Principal = ₹ 8,000
Period = 6 months = $\frac{1}{2}$ year.
Interest = $8,480 - 8,000 = ₹ 480$
- (3) Principal = ₹ 6,00,000
Period = 5 years
Interest = $8,40,000 - 6,00,000 = ₹ 2,40,000$
- Q.2. (1)** If a person borrows ₹ 100 from Jijamata Co-operative Credit Society for a year, then at the end of the year, he must pay ₹ 12 as interest to the society.
- (2) If a person borrows ₹ 100 from Rajgad Sahakari Bank for a year, then at the end of the year, he must pay an interest of ₹ 8 to the bank.

- Q.3. (1)** Interest for one year = ₹ 720
 \therefore Interest for 5 years = $720 \times 5 = ₹ 3,600$.
- (2)** Interest for two years = ₹ 3,300
 \therefore Interest for 6 years = $3,300 \times 3 = ₹ 9,900$.
- (3)** Interest for 3 years = ₹ 2,700
 \therefore Interest for 15 years = $2,700 \times 5 = ₹ 13,500$.

- Q.4. (1)** ₹ 600 (2) ₹ 70
 (3) ₹ 1350 (4) ₹ 720

Long Answer Type

- 1. (1)** Principal = ₹ 15,000, Period = 1 year
 Rate = 7 p.c.p.a
 If principal will increase then interest also will increase.
 \therefore on ₹ 100 interest is ₹ 7
 \therefore on ₹ 15,000 interest is x
 $\therefore \frac{x}{15,000} = \frac{7}{100}$
 $\therefore \frac{x}{15,000} \times 15,000 = \frac{7}{100} \times 15,000$
 $\therefore x = 1,050$

Ans. Vinita will get interest of ₹ 1,050

- (2)** Vilasrao will pay ₹ 21,600 to the bank at the end of the 1 year.

(Text Book Practice Set 35)

- (3)** Interest at the end of the year will be ₹ 600.
(4) Mahesh will get ₹ 9,169 at the end of the year.

- (5)** At the end of the year Ahmed Chacha has to pay ₹ 28,000 to the bank.
(6) At the end of the year Kishanrao has to pay interest of ₹ 5,640 to the bank.
(7) (1) ₹ 120 **(2)** ₹ 180 **(3)** ₹ 4,800 **(4)** ₹ 4,000

15. Triangles and their properties

FORMATIVE EVALUATION

Unit Test

- Q.1. [A]** (1) 90° (2) Equilateral (3) Acute angled
 (4) Obtuse angled (5) Acute angled (6) 180°
 (7) greater
- [B]** (1) c, (2) b, (3) d, (4) e, (5) a.

Questionnaire

- Q.1. (1)** False (2) True (3) False
- Q.2. (1)** False (2) False (3) True (4) False
- Q.3. (1)** Isosceles triangle (2) Acute angled triangle
 (3) Obtuse angled triangle (4) Scalene triangle
 (5) Right angled triangle (6) Equilateral triangle

Quiz

- Q.1. (a)** Obtuse angled triangle (b) Isosceles triangle
 (c) $(90^\circ - 30^\circ - 60^\circ)$ (d) $(60^\circ - 60^\circ - 60^\circ)$
- Q.2. 1.** (a) $\angle(BC)$ (b) $\angle(AD)$ (c) $\angle(AD)$

Class Assignments

- Q.1 (1)** 80° **(2)** 60° **(3)** 45°

(Text Book Practice Set 36)

- Q.2.** 1. Scalene triangle 2. Isosceles triangle.
3. Equilateral triangle. 4. Scalene triangle.
- Q.3.** From the above, only these triangles can be drawn: (5) 15 cm, 20 cm, 25 cm (2) 7 cm, 24 cm, 25 cm (6) 12 cm, 12 cm, 16 cm.
- Reason:** Because in Q. 2, 5 and 6 sums of any two sides of the given triangle are more than the third side.
- Q.4.** Avinash will choose AC road because by that road distance is less to school, so he will reach early to school. This AC distance is less because in a triangle sum of two sides is more than the third side.
i.e. $CB + AB > AC$.

SUMMATIVE EVALUATION

Semester Examination

Objective Type

- Q.1.** (1) Right (2) Acute angles (3) acute angles
(4) Scalene (5) Isosceles triangle
- Q.2.** (1) Wrong (2) Right (3) Wrong

(Text Book Practice Set 36)

- Q.3.** (1) $\triangle PQR$ is right angled triangle.
(2) $\triangle XYZ$ is an obtuse angled triangle.
(3) $\triangle LMN$ is an acute angled triangle.
- Q.4.** (1) $\triangle UVW$ is an isosceles triangle.
(2) $\triangle DEF$ is a scalene triangle.
(3) $\triangle ABC$ is an equilateral triangle.

Subjective Type

Short answer Type

- Q.1.** (1) $\triangle ABO, \triangle ACO, \triangle BOC, \triangle ABC$
(2) $\triangle AOB, \triangle BOC, \triangle AOC$
(3) $\triangle ABC, \triangle BAO, \triangle CAO$
- Q.2.** (1) Acute angled triangle (2) Isosceles triangle
(3) Right angled triangle (4) Obtuse angled triangle
(5) Equilateral triangle (6) Scalene triangle
- Q.3.** $m \angle T = 80^\circ$
- Q.4.** $m \angle TRN = 70^\circ$
- Q.5.** $m \angle A = m \angle B = 20^\circ$

16. Quadrilaterals

FORMATIVE EVALUATION

Unit Test

- Q.1. [A]** (1) closed (2) four (3) quadrilateral
(4) 4 (5) 360°

(Text Book Practice Set 37)

- Q.2.** (1) Pentagon (2) Hexagon
(3) Heptagon/Septagon (4) Octagon

Questionnaire

- Q.1.** 1-(f), 2-(e), 3-(d), 4-(c), 5-(b), 6-(a)
- Q.2.** Fig No. 1, 2, 4 are quadrilaterals.
- Q.3. (1)** $\square ABCD, \square BCDA, \square CDAB, \square DABC$

- (2) □ PQRS, □ QRSP, □ RSPQ, □ SPQR
 (3) □ WXYZ, □ XYZW, □ YZWX, □ ZWXY
 (4) □ DEFG, □ EFGD, □ FGDE, □ GDEF

- Q.4. (1)** (a) Opposite angles : (1) $\angle A$ and $\angle C$ (2) $\angle B$ and $\angle D$
 (b) Opposite sides : (1) Seg AB and Seg DC
 (2) Seg AC and Seg BD

- (2) (a) Opposite angles : (1) $\angle P$ and $\angle R$ (2) $\angle S$ and $\angle Q$
 (b) Opposite sides : (1) Seg PQ and Seg SR
 (2) Seg PS and Seg QR

Q.5. (1) (a) Adjacent sides

- (1) Seg AB and Seg BC (2) Seg BC and Seg CD
 (3) Seg CD and Seg AD (4) Seg AD and Seg AB

(b) Adjacent angles

- (1) $\angle A$ and $\angle B$ (2) $\angle B$ and $\angle C$
 (3) $\angle C$ and $\angle D$ (4) $\angle D$ and $\angle A$

(2) (a) Adjacent sides

- (1) Seg PQ and Seg PS (2) Seg PS and Seg SR
 (3) Seg SR and Seg QR (4) Seg QR and Seg PQ

(b) Adjacent angles

- (1) $\angle P$ and $\angle S$ (2) $\angle S$ and $\angle R$
 (3) $\angle R$ and $\angle Q$ (4) $\angle Q$ and $\angle P$

- Q.6. (1)** Diagonals : Seg AC and Seg BD

- (2)** Diagonals : Seg PR and Seg QS

SUMMATIVE EVALUATION

Semester Examination

Objective Type

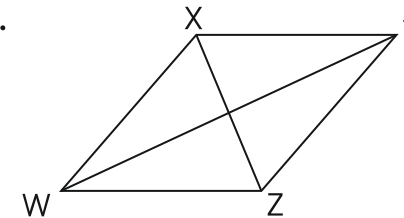
(Text Book Practice Set 38)

Q.1.

Names	Quadrilateral	Octagon	Pentagon	Heptagon	Hexagon
No. of sides	4	8	5	7	6

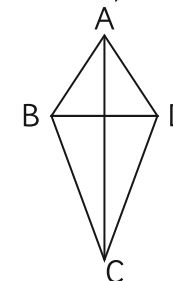
- Q.2. (1)** □ PQRS, □ QRSP, □ RSPQ, □ SPQR

Q.3.



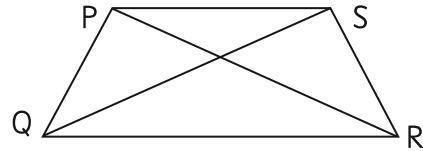
- (1) $\angle X$ and $\angle Z$, $\angle W$ and $\angle Y$
 (2) Seg XW and Seg WZ, Seg WZ and Seg ZY,
 Seg ZY and Seg XY, Seg XY and Seg XW
 (3) Seg XW and Seg YZ, Seg WZ and Seg XY.
 (4) $\angle X$ and $\angle W$, $\angle W$ and $\angle Z$, $\angle Z$ and $\angle Y$, $\angle Y$ and $\angle X$.
 (5) Seg XZ and Seg WY.
 (6) □ XWZY, □ WZYX, □ ZYXW, □ YXWZ.

Q.4.



- (1) □ ABCD, □ BCDA, □ CDAB, □ DABC
 (2) Seg AB, Seg BC, Seg CD, Seg DA.
 (3) A, B, C, D
 (4) ∠A, ∠B, ∠C and ∠D

Q.5.



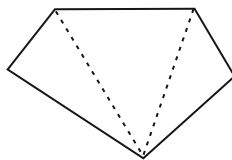
- (1) □ PQRS, □ QRSP, □ RSPQ, □ SPQR
 (2) Seg PR and Seg QS
 (3) Seg PQ and Seg QR, Seg QR and Seg RS, Seg RS and Seg PS, Seg PS and Seg PQ
 (4) Seg PQ and Seg SR, Seg QR and Seg PS
 (5) ∠P and ∠R, ∠Q and ∠S
 (6) ∠P and ∠Q, ∠Q and ∠R, ∠R and ∠S, ∠S and ∠P.

- Q.6. Given polygon is a Hexagon which is made up of 4 triangles.
 Sum of all the angles of a triangle = 180°
 \therefore Sum of all the angles of 4 triangles = $180 \times 4 = 720^\circ$

- Q.7. (1) Given polygon is Pentagon which is made up of 3 triangles.

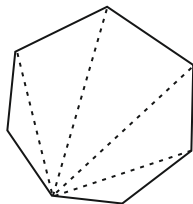
Sum of all the angles of a triangle = 180°

\therefore Sum of all the angles of 3 triangles = $3 \times 180^\circ = 540^\circ$

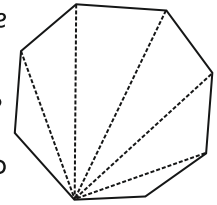


- (2) Given polygon is Heptagon which is made up of 5 triangles. Sum of all the angles of a triangle = 180°

\therefore Sum of all the angles of 5 triangles = $5 \times 180^\circ = 900^\circ$



- (3) Given polygon is Octagon which is made up of 6 triangles.
 Sum of all the angles of a triangle = 180°
 \therefore Sum of all the angles of 6 triangles = $6 \times 180^\circ = 1080^\circ$



17. Geometrical Constructions

FORMATIVE EVALUATION

Unit Test

- Q.1. [A] (1) Perpendicular (2) \perp
 (3) bisector (4) Perpendicular bisector
 [B] (1)-e, (2)-c, (3)-a, (4)-b, (5)-d.
 [C] (1) False (2) False (3) True (4) False

Questionnaire

- Q.1. [A] (1) \perp (2) Perpendicular bisector
 (3) bisector (4) Perpendicular
 [B] (1)right (2)wrong (3)right (4)right

Quiz

- Q.1. Line RS is perpendicular bisector of seg AB.

Orals

- Q.1. (1) 10.4 cm (2) 7.7 cm (3) 1.5 cm (4) 2.9 cm

SUMMATIVE EVALUATION

Semester Examination

Objective Type

- Q.1. (1) bisector (2) perpendicular (3) right angles (4) equal

Q.2. (1) 90° (2) 1.3 cm (3) 8.7 cm (4) $l(AM) = 2.8$ cm

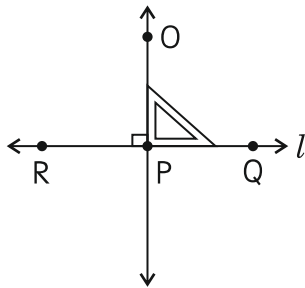
Subjective Type

Short Answer Type

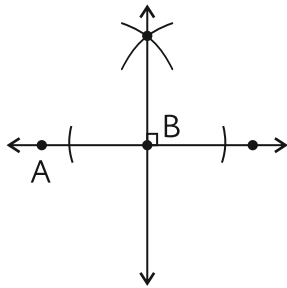
- Q.1.** (1) Seg $MR \perp$ ray ST (2) Line $LM \perp$ seg PQ
 (3) Line $HP \perp$ ray OK (4) Seg $KG \perp$ Seg VI
 (5) Line $AD \perp$ line EF (6) Seg $XY \perp$ line PQ
 (7) Ray $AB \perp$ ray CD

(Text Book Practice Set 39)

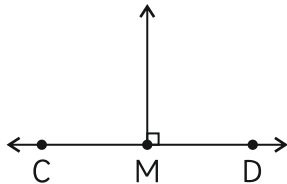
Q.2.



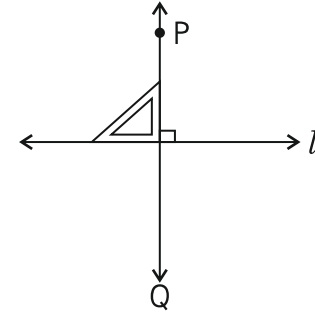
Q.3.



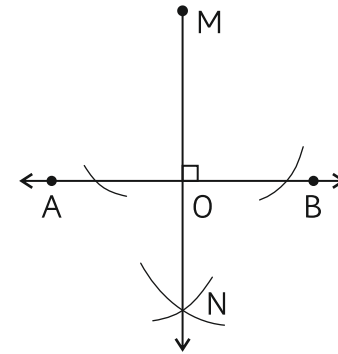
Q.4.



Q.5.

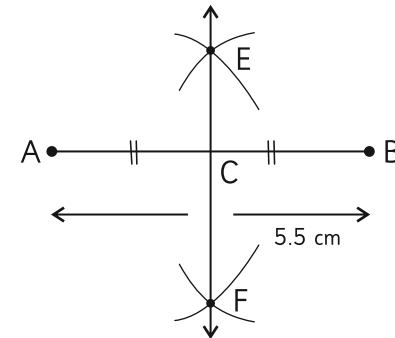


Q.6.

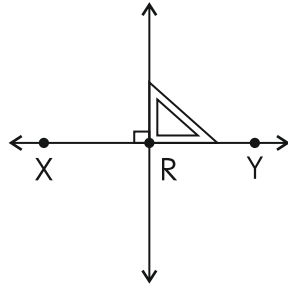


(Text Book Practice Set 40)

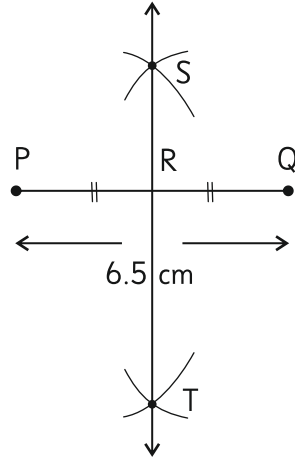
Q.7.



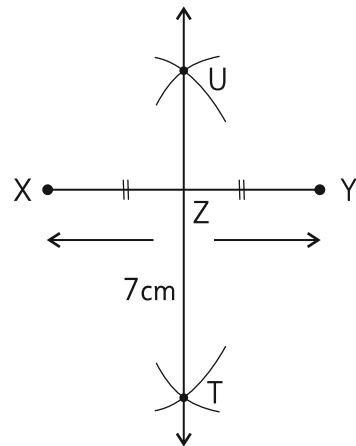
Q.8.



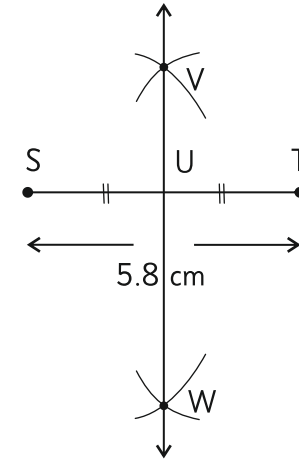
Q.9. (1)



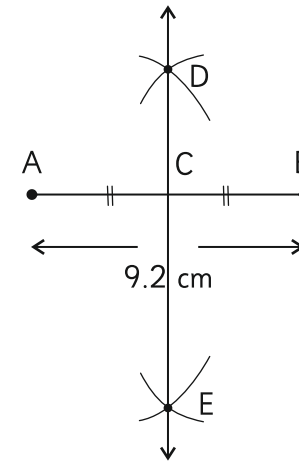
(2)



(3)



(4)



18. Three Dimensional Shapes

FORMATIVE EVALUATION

Unit Test

Q.1. [A] (1) 6 (2) 1 (3) 12

(4) Cuboid (5) Triangular prism

[B] (a) 6, (b) 5, (c) 4, (d) 3, (e) 2

- [C] (1) Sphere (2) Cone (3) Cylinder
 (4) Hexagonal pyramid (5) Pentagonal Prism
- [D] (1) Dice (2) Match box (3) Ice cream cone
 (4) Pencil (5) Battery cell

Questionnaire

- Q.1. (1) Wrong - Christmas tree is an example of cone.
 (2) Wrong - Mobile phone is an example of cuboid.
 (3) Right (4) Right
 (5) Wrong - Honey comb is an example of Hexagonal prism.

Quiz

Q.1.

Sr. No.	3D figure	Faces	Edges	Vertices
1.	Cube	6	12	8
2.	Cuboid / Rectangular prism	6	12	8
3.	Closed Cone	2	1	1
4.	Pentagonal Pyramid	6	10	6
5.	Pentagonal Prism	7	15	10
6.	Hexagonal Pyramid	7	12	7
7.	Hexagonal Prism	8	18	12
8.	Square Pyramid / Quadrangular Pyramid	5	8	5
9.	Triangular Prism	5	9	6

SUMMATIVE EVALUATION

Semester Examination

Subjective Type

(Text Book Practice Set 41)

Q.1.

Name	Cylinder	Cone	Pentagonal Pyramid	Hexagonal Pyramid	Pentagonal Prism	Hexagonal Prism
Faces	1 curved	1 curved	6	7	8	7
	2 flat	1 flat				
Vertices	0	1	6	7	12	10
Edges	2 circular	1 circular	10	12	18	15