

PERIMETER AND AREA (Explanation)

PERIMETER- The perimeter of a figure is the distance around it.

For Example, to fence the garden at your house, the length required of the material **for fencing** is the **perimeter** of the garden.



Area- The amount of surface a figure covers is its area.

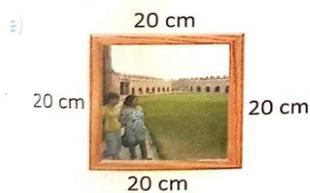
1	2	3
4	5	6



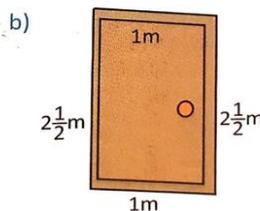
TEXTBOOK

EXERCISE 1

1. Find the **perimeter**.



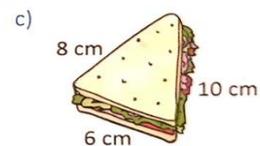
$$\text{Perimeter} = \text{Sum of all sides} \\ 20 + 20 + 20 + 20 \\ 80 \text{ cm}$$



$$\text{Perimeter} = \text{Sum of all sides} \\ 2 \cdot 5 + 1 + 2 \cdot 5 + 1$$

7 m

To find the perimeter of a square, how many sides do you have to measure?

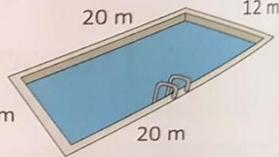


$$\text{Perimeter} = \text{Sum of all sides} \\ = 8 + 6 + 10 \\ = 24 \text{ cm}$$

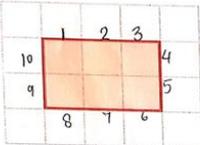


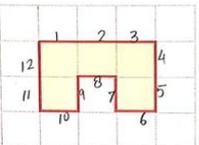
d)  Perimeter = Sum of all sides
 $= 6 + 15 + 6 + 15$
 $= 42 \text{ cm}$

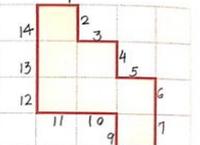
e)  Perimeter = Sum of all sides
 $= 60 + 40 + 60 + 40$
 $= 200 \text{ cm}$

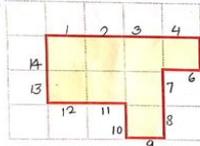
f)  Perimeter = Sum of all sides
 $= 20 + 12 + 20 + 12$
 $= 64 \text{ m}$

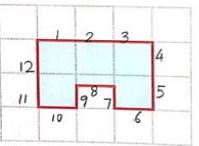
4. Find the perimeter of these figures. Each small square is of side 1 cm.

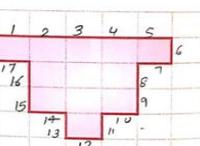
a)  Perimeter = 10 cm

b)  Perimeter = 12 cm

c)  Perimeter = 14 cm

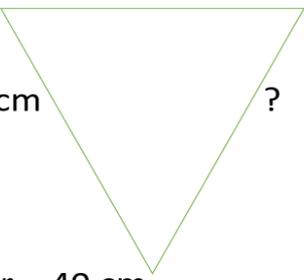
d)  Perimeter = 14 cm

e)  Perimeter = 12 cm

f)  Perimeter = 18 cm

Q.3 omit

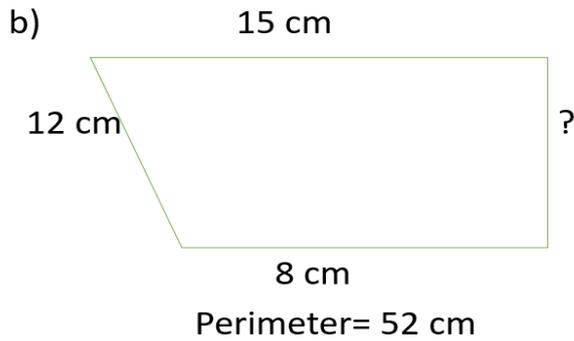
Q.4 Find the missing side. (NOTEBOOK)

a)  Perimeter = 40 cm

Solution:

Sum of known sides = $12 \text{ cm} + 15 \text{ cm} = 27 \text{ cm}$

Unknown side = Perimeter - sum of known sides
 $= 40 \text{ cm} - 27 \text{ cm} = 13 \text{ cm}$



Solution: Sum of known sides= 12cm+ 15cm+8cm= 35 cm
Unknown side= Perimeter – sum of known sides
= 52 cm-35cm= 17 cm

Q.5 A square garden of side 50 m has to be fenced all around. What is the length of the fencing required?

Solution:

$$\begin{aligned} \text{Perimeter} &= \text{Sum of all sides} \\ &= 50\text{m}+50\text{m}+50\text{m}+50\text{m} \\ &= 200 \text{ m} \end{aligned}$$



Ans. Length of the fencing required= 200 m

Q.6 H.W

EXPLANATION

◆ Area

Look at these figures. They are made up of square tiles.

1	2
3	4

A

1	2	3
4	5	6

B

1	3	5	7
2	4	6	8

C

Count the number of square tiles in each figure.

Figure A is made up of 4 square tiles.

Figure B is made up of 6 square tiles.

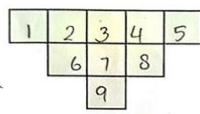
Figure C is made up of 8 square tiles.



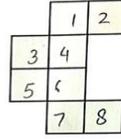
TEXTBOOK

EXERCISE 2

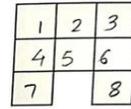
1. Look at the figures and answer the questions.



A



B

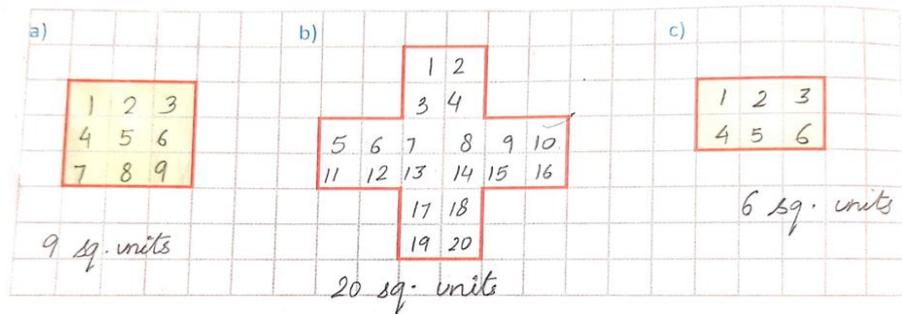


C

- a) How many square tiles make each figure? A: 9 B: 8 C: 8
 b) Each tile is 1 square unit. What is the area of each figure?
 A: 9 square units B: 8 square units C: 8 square units
 c) Which figure has the smallest area? B and C
 d) Which two figures have the same area? B and C

TEXTBOOK

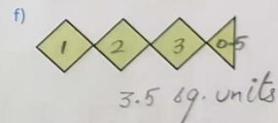
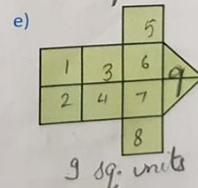
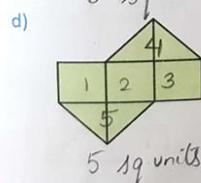
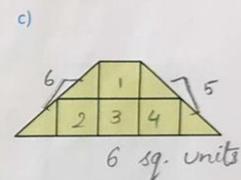
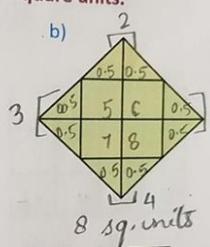
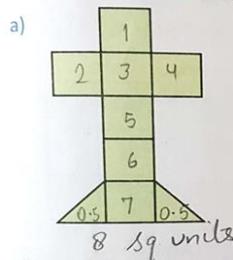
2. Find the area of each figure in square units.



TEXTBOOK

EXERCISE 3

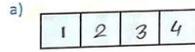
1. Find the area of each figure in square units.



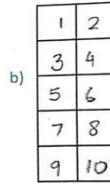
TEXTBOOK

EXERCISE 4

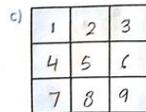
1. Find the area of each figure in sq. cm.



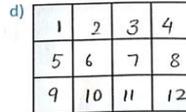
Area = 4 sq. cm



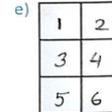
Area = 10 sq. cm



Area = 9 sq. cm



Area = 12 sq. cm



Area = 6 sq. cm

TEXTBOOK

2. Find the area of each figure in sq. cm, if each small square is of 1 cm side.

a)

9 sq. cm

b)

11 sq. cm

c)

9 sq. cm

174

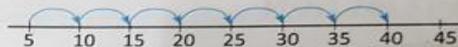
CHAPTER- 13

TIME

CHECK WHAT YOU KNOW (SELF PRACTICE)

Check what you know

Skip count in 5s to find minutes.



$$8 \times 5 = 40$$

The time is 40 minutes past 4
or 4:40

1. What is the time on the clock? Write in two ways.



20 minutes past 3
3:20



35 min past 7
7:35



10 min past 10
10:10



50 min past 9
9:50

2. Match the time with the clock.

i. 1 hour after 5:45 ii. 30 minutes before 8:00

iii. 60 minutes after 9:30 iv. 2 hours before 6:15

a)  b)  c)  d) 

i iii iv ii

3. Put a ✓ on the activities you can do in less than 1 minute.

a) Tie your shoelaces. b) Finish your homework.

c) Pick up a book from a table. d) Pack your bag.

4. Fill in the blank.

a) 1 week = 7 days b) 1 year = 12 months

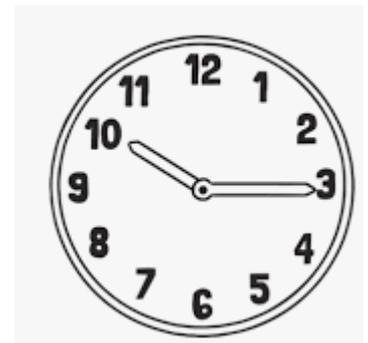
c) 1 month = 28, 29, 30 or 31 days

Concepts Section

Tell Time in different ways

Examples

- (i) 15 minutes past 10
- (ii) 45 minutes to 11
- (iii) 10:15



Normally we use:

Minutes past the hour when the minute hand shows less than 30 minutes.

Minutes to the hour when the minute hand shows more than 30 minutes.

Exercise-1(notebook)

Q.1 Tell Time in two ways.



8:25

25 minutes past 8

35 minutes to 9



12:10

10 minutes past 12

50 minutes to 1

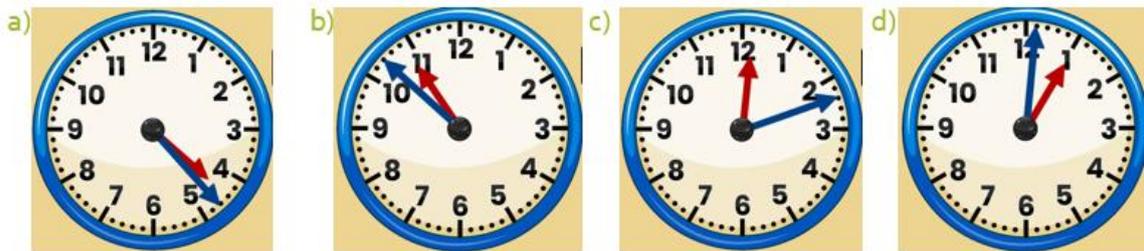
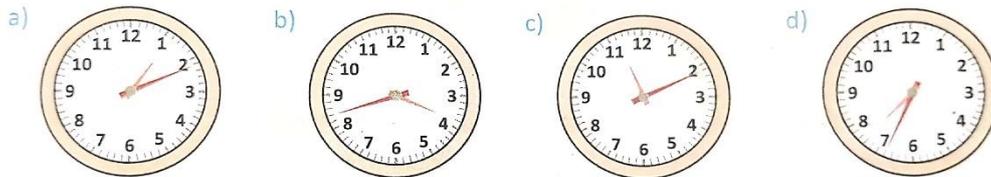
e) 7:15
Quarter past 7
45 minutes to 8

h) 5:55
55 minutes past 5
5 minutes to 6

Exercise-2 (textbook)

EXERCISE 2

1. Match the time.



Use of a.m. and p.m. (Explanation)

- **A.m.** for time after 12:00 midnight and before 12:00 noon.
- **P.m.** for time after 12:00 noon and before 12:00 midnight.
- We do not write 12a.m. or 12 p.m. Instead, we write **12 midnight** and **12 noon** respectively.

Exercise-3

Q.1 and Q.2 (textbook)

EXERCISE 3

1. Fill in the blanks with a.m. or p.m.



a) 6:00 a.m.



b) 11:30 p.m.



c) 8:00 p.m.



d) 8:00 a.m.

2. Fill in the blanks with a.m. or p.m.

- Monu gets up from bed at 6:30 a.m.
- Amina comes back from school at 3:20 p.m.
- Anand goes to sleep at 9:30 p.m.
- Sandhya eats lunch at 12:45 p.m.
- Manpreet goes to the playground at 3:30 p.m.



Q.3 Write the time.

- a) 4 hours after 5:25 p.m.: 9:25 p.m.
- c) 30 minutes before 12: 30 p.m.: 12 noon
- e) 45 minutes before 12 midnight: 11:15 p.m.

24- hour clock (explanation)

In the 24 hour clock system, time is written in 4 digits. The first 2 digits show the hours. The Next two digits show the minutes.

The day starts at 12 midnight, written as 00:00 hours

In this system, there is no need to write a.m. or p.m. After the time.

12-hour clock

12 midnight
 1:00 a.m.
 2:00 a.m.
 3:00 a.m.
 4:00 a.m.
 5:00 a.m.
 6:00 a.m.
 7:00 a.m.
 8:00 a.m.
 9:00 a.m.
 10:00 a.m.
 11:00 a.m.
 12 noon
 1:00 p.m.
 2:00 p.m.
 3:00 p.m.
 4:00 p.m.
 5:00 p.m.
 6:00 p.m.
 7:00 p.m.
 8:00 p.m.
 9:00 p.m.
 10:00 p.m.
 11:00 p.m.
 12 midnight

24-hour clock

00:00 hours 
 01:00 hours
 02:00 hours
 03:00 hours
 04:00 hours
 05:00 hours
 06:00 hours
 07:00 hours
 08:00 hours
 09:00 hours
 10:00 hours
 11:00 hours
 12:00 hours 
 13:00 hours
 14:00 hours
 15:00 hours
 16:00 hours
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 18:00 hours
 19:00 hours
 20:00 hours
 21:00 hours
 22:00 hours
 23:00 hours
 00:00 hours

Exercise-4

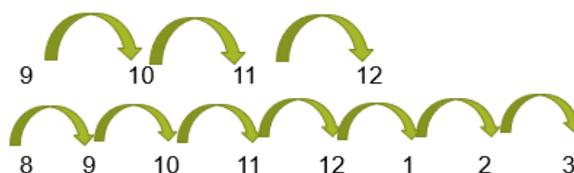
- 1. This is what Deepu does every day from Monday to Friday. Fill in the blanks with 24-hour times.
- b) Goes to school at 8:15 a.m. = 08:15 Hours
- c) Has Lunch in school at 12 noon= 12:00 Hours
- d) Is back from school at 2:45 p.m.= 14:45 Hours
- Q.2 Convert the time into the 12-hour clock.
- A) AI 101 Delhi- New York 1:30 hours: 1:30 a.m.
- d) G9 446 Delhi – Dubai 18:35 hours: 6:35 p.m.

Time Interval- It is the amount of time that has passed between the start and the end of an activity.

Exercise-5

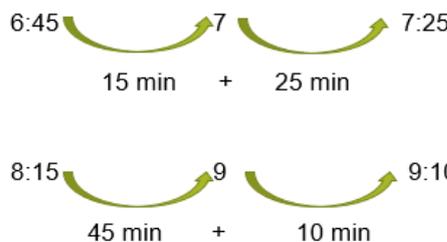
Q.1 Find the number of hours between :

- a) 9:00 a.m. and 12 noon = 3 hours
- d) 8:00 p.m. and 3:00 a.m. = 7 hours



Q.2 Find the number of minutes between :

- a) 6:45 a.m. and 7: 25 a.m.= 40 min
- d) 8:15 p.m. and 9:10 p.m.= 55 min

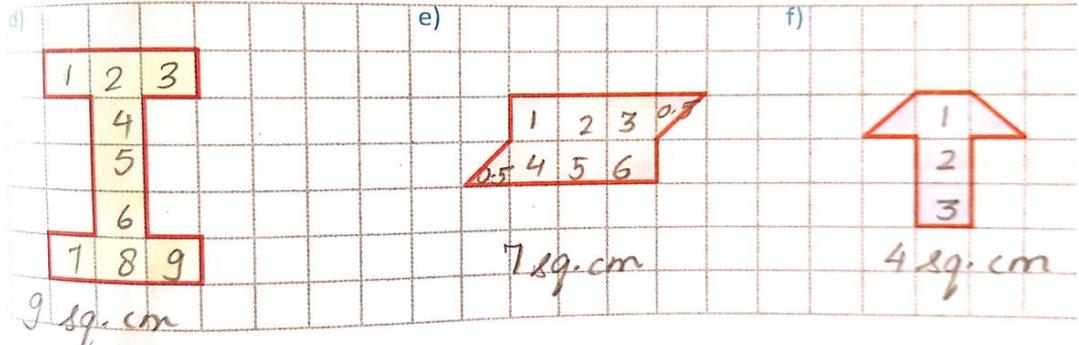
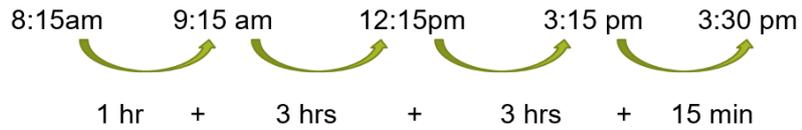


Q.3 Find the time interval from:

a) 5:45 p.m. to 8:10 p.m. = 2 Hours 25 minutes



d) 8:15 a.m. to 3:30 p.m. = 7 hours 15 minutes



DELHI PUBLIC SCHOOL, GANDHINAGAR

CLASS : 4

SUBJECT: MATHS

Academic Session 2021-22

CHAPTER- 10

MONEY

EXERCISE 1

H.W - f

Q.1

ADD

B) ₹ 56.75 + ₹ 175.75

E) ₹ 111.95 + ₹ 15.75 + ₹ 226.40

	1	1	1	.	1	
		5	6	.	7	5
+	1	7	5	.	7	5
	2	3	2	.	5	0

	0	1	2	.	1	
	1	1	1	.	9	5
		1	5	.	7	5
+	2	2	6	.	4	0
	3	5	4	.	1	0

EXERCISE 1

H.W- b,f

Q.2

SUBTRACT

A) ₹ 100 - ₹ 79.95

C) ₹ 510.25 - ₹ 150.50

				.		
	1	0	0	.	0	0
-		7	9	.	9	5
		2	0	.	0	5

				.		
	5	1	0	.	2	5
-	1	5	0	.	5	0
	3	5	9	.	7	5

Q.3 Solve the word problems.

a) Parul bought a pair of shoes for ₹ 145.95 and a pair of socks for ₹ 36.50. How much money did she spend?

Solution:

Cost of a pair of shoes for ₹ 145.95

Cost of a pair of socks for ₹ 36.50

She spends in all =

		1	1			
	1	4	5	.	9	5
+		3	6	.	5	0
	1	8	2	.	4	5

Ans. Money she spends ₹ 182.45



d) Make the bill and find the total amount spent on the following things.

1 kg sugar for ₹ 35.50

500 g cashew for ₹ 450.25

100 g biscuits for ₹ 54.75

If the amount paid is ₹ 600, what is the change received?

MALU GROCERY SHOP		
BILL		
ITEM	QUANTITY	COST
SUGAR	1 KG	₹ 35.50
CASHEW	500 G	₹450.25
BISCUITS	100 G	₹54.75
TOTAL	1 KG 600 G	₹ 540.50

Amount paid to shopkeeper = ₹ 600

Amount spent = ₹ 540.50

Amount left =

	5	9	9		10	
	6	0	0	.	0	0
-	5	4	0	.	5	0
	0	5	9	.	5	0

Ans. Amount left ₹ 59.50

E) Nasim spent ₹ 13.50. He had ₹ 11.50 left. How much money did he start with ?

Solution:

Nasim spent ₹ 13.50

Money he left with = ₹ 11.50

Money he had in starting =

		1			
	1	3	.	5	0
+	1	1	.	5	0
	2	5	.	0	0

Ans. He had in starting ₹ 25.

f) H.W



Exercise- 2

Q.1 Multiply

a) ₹ 42.25 x 7

	1	1		3		
	4	2	.	2	5	
x					7	
	2	9	5	.	7	5

e) ₹ 147.25 x 28

		3	5	2		4	
		1	4	7	.	2	5
x						2	8
	1	1	7	8	.	0	0
+	2	9	4	5	.	0	x
	4	1	2	3	.	0	0

d) ₹ 23.50 x 25 (H.W)

Q.2 Solve the word problems.

C) Nargis likes to eat a banana every day. If one banana costs ₹ 0.75, how much does she spend on bananas in the month of April?

Solution:

Number of days in April= 30 days

Cost of 1 banana = ₹ 0.75

Nargis eats banana everyday

She spends on bananas = 30 x ₹ 0.75

$$= ₹ 22.50$$

		7	5
x		3	0
		0	0
2	2	5	0
2	2	5	0

Exercise- 3 (Omit)

Mental Math (N.B)

1. ₹ 19.75 + ₹ 0.25 = ₹ 20
2. ₹ 10 - ₹ 9.50 = ₹ 0.50
3. ₹ 2.50 × 2 = ₹ 5.00
4. ₹ 10.00 ÷ 2 = ₹ 5.00
5. ₹ 100 - ₹ 49.90 = ₹ 50.10
6. ₹ 12.50 + ₹ 12.50 = ₹ 25.00

AIL

Q. Rita went to market. she purchases one ball of ₹ 150.25 and one toy car of ₹ 220.50. Rita gave ₹ 500 to the shopkeeper. how much amount is left with Rita?

Price of ball = ₹ 150.25
Price of toy car = ₹ 220.50
Total amount spent = ₹ 370.25

	1	5	0	.	2	5
+	2	2	0	.	5	0
	3	7	0	.	7	5

	5	0	0	.	0	0
-	3	7	0	.	7	5
	1	2	9	.	2	5



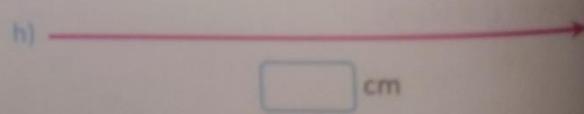
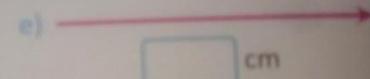
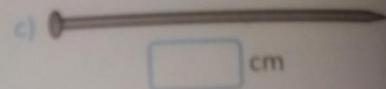
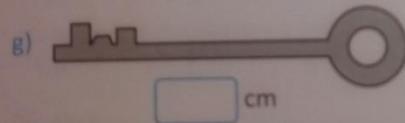
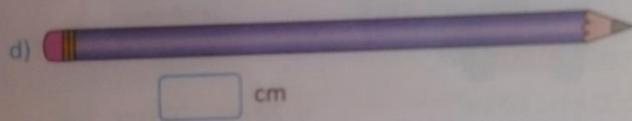
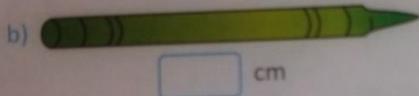
Ans: Amount left with Rita = ₹ 129.25

MEASUREMENTS

EXERCISE 1

Measure the lengths of these objects using a scale.

Measure to the nearest cm or $\frac{1}{2}$ cm.



EXERCISE 2(NOTEBOOK)

Draw line-segments of the following lengths.

- a) 5cm
- b) $4\frac{1}{2}$
- c) 8 cm
- d) $10\frac{1}{2}$ cm

Conversion of units

Length- metre to centimetre(NOTEBOOK)

To convert from metre to centimetre , multiply by 100.

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

EXERCISE-3

1. Convert into centimetres.

a) The height of my house is 3m.

Ans: The height of my house is $3 \times 100 = 300\text{cm}$.

b) The length of this table is 1m80cm.

$1\text{m} = 100\text{cm}$, $100\text{cm} + 80\text{cm} = 180\text{cm}$

Ans: The length of this table is 180cm

D) The height of this multi-storey building is 15m 50cm.

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

$15\text{m} = 15 \times 100 = 1500\text{cm} + 50\text{cm} = 1550\text{cm}$.

Ans: The height of this multi-storey building is 1550cm

Length- centimetre to metre(NOTEBOOK)

To convert from centimetre to metre , divide by 100.

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

EXERCISE-4

1. Convert into metres.

a) The height of this camel is 350cm.

$350 \div 100 = 3\text{m}50\text{cm}$

Ans: The height of **this camel** is 3m50cm.

b) The length of this sari is 540cm

$1\text{m} = 100\text{cm}$, $540 \div 100 = 5\text{m}40\text{cm}$

Ans: The length of this **sari** is 5m40 cm

D) The is a very tall tree. Its height is 2060cm.

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

$2060 \div 100 = 20\text{m}60\text{cm}$

Ans: This is a **very tall tree. Its height** is 20m60 cm

Length- kilometre to metre (NOTEBOOK)

To convert from kilometre to metre , multiply by 1000.

$$1\text{km}=1000\text{m}$$

EXERCISE-5

- a) **The distance from Jagdish,s house to the zoo is 3 km 425m.How many metres is that?.**

$$1 \text{ km}=1000\text{m}$$

$$3 \text{ km}=3\times 1000=3000\text{m}$$

$$3000\text{m}+425\text{m}=3425\text{m}$$

Ans: 3425m

- d) **In a marathon race, the runners had to run 10km 555m .Express this distance in metres.**

$$1 \text{ km}= 1000\text{m}$$

$$10 \text{ km}= 10\times 1000=10,000\text{m}$$

$$10,000\text{m} + 555\text{m}=10,555\text{m}$$

Ans:10,555m

Length- Metre to Kilometre (NOTEBOOK)

To convert from metre to kilometre , divide by 1000.

$$1000\text{m}=1\text{km}$$

EXERCISE-6

- a) **The distance from Manish's house to the market is 2525m.Convert the distance to kilometres and metres.**

$$1 \text{ km}=1000\text{m}$$

$$2525\div 1000$$

Ans: 2 km 525m

- d) **Ajay's family went on a 5010 m boat ride on the Ganges river. Express the distance in kilometres and metres.**

$$1 \text{ km}=1000\text{m}$$

$$5010 \div 1000$$

Ans: 5 km 10 m

Measurement of Mass (or weight) (NOTEBOOK)

The common units for measuring mass are grams(g) and kilograms (Kg). We use kilogram for heavier objects and gram for lighter objects.

$$1000\text{g}=1 \text{ kg}$$

EXERCISE-9(NOTEBOOK)

1 Convert into grams:

a)8 kg

$$1 \text{ kg}=1000\text{g}$$

$$8 \text{ kg}=8 \times 1000$$

$$8000\text{g}$$

b)2 kg 225g

$$1 \text{ kg}=1000\text{g}$$

$$2 \text{ kg}=2 \times 1000$$

$$=2000\text{g}$$

$$2000\text{g}+225\text{g}$$

$$=2225\text{g}$$

2. Convert into kilogram.

b) 4235g

$$1 \text{ kg}=1000\text{g}$$

$$4235 \div 1000$$

$$=4\text{kg } 235 \text{ g}$$

a)6000g

$$1 \text{ kg}=1000\text{g}$$

$$6000 \div 1000$$

$$=6 \text{ kg } 000\text{g}$$

3. Express in grams

a) $2\frac{1}{2}$

1 kg=1000g

2kg =2×1000=2000g

$$\frac{1}{2} = 500 g$$

2000g+500g ==2500g

b) $5\frac{3}{4}$ kg

1 kg=1000g

5kg =5×1000=5000g

$$\frac{3}{4} = 750g$$

5000g+750g

=5750g

- The common units for measuring capacity and volume are millilitres and litres.
- 1000ml=1litres
- 1000ml= 500ml+500ml

OR $\frac{1}{2} l + \frac{1}{2} l$

- 1000ml=250ml+250ml+250ml+250ml OR $=\frac{1}{4} l + \frac{1}{4} l + \frac{1}{4} l + \frac{1}{4} l$
- 750ml= $\frac{3}{4} l$

EXERCISE-10(NOTEBOOK)

Q.1 Convert into millilitres.

a) 4 litres

1 litres= 1000ml

4 litres=4x 1000ml

= 4000ml

b) 3l 105 ml

$$1 \text{ litres} = 1000\text{ml}$$

$$3 \text{ litres} = 3 \times 1000\text{ml}$$

$$= 3000\text{ml}$$

$$= 3000\text{ml} + 105\text{ml}$$

$$= 3105\text{ml}$$

Exercise 10(NOTEBOOK)

2.Convert into litres

a) 8000ml

$$1\text{L} = 1000\text{ml}$$

$$8000\text{ml} \div 1000\text{ml}$$

$$8 \text{ l } 000\text{ml}$$

b)6080ml

$$1\text{L} = 1000\text{ml}$$

$$6080\text{ml} \div 1000\text{ml}$$

$$= 6\text{L } 80\text{ml}$$

3.Express in milliliters

a) $2\frac{1}{4}\text{L}$

$$1\text{L} = 1000\text{ml}$$

$$2\text{L} = 2 \times 1000 = 2000\text{ml}$$

$$\frac{1}{4}\text{L} = 250\text{ml}$$

$$2000\text{ml} + 250\text{ml}$$

$$= 2250\text{ml}$$

b) $9\frac{1}{2}\text{L}$

$$1\text{l} = 1000\text{ml}$$

$$9\text{L} = 9 \times 1000$$

$$9000\text{ML}$$

$$\frac{1}{2}\text{L} = 500\text{ml}$$

$$9000\text{ml} + 500\text{ml}$$

$$= 9500\text{ml}$$

Mixed Bag

1. Choose the correct answer.

a) To convert kg to g, you will:

- i. multiply by 100 ii. divide by 100 iii. multiply by 1000 iv. divide by 1000

b) Nagma uses a scale to draw a line segment on paper. She draws the line from the 2 cm mark on the scale to the 12 cm mark. What is the length of the line segment?

- i. 12 cm ii. 2 cm iii. 9 cm iv. 10 cm

c) What fraction of a metre is 50 cm?

- i. $\frac{1}{2}$ ii. $\frac{1}{20}$ iii. $\frac{1}{10}$ iv. $\frac{1}{4}$

d) 500 ml + 500 ml is:

- i. 1000 ml ii. 1 l iii. 10 l iv. both i and ii

EXERCISE- 7,8,11 (OMIT)

Academic Session 2021-22

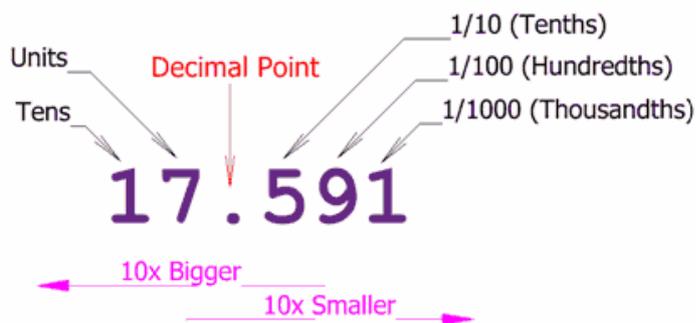
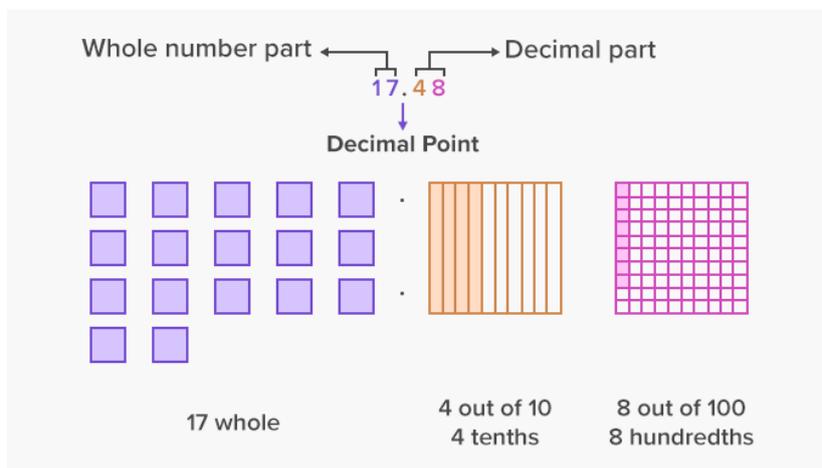
Chapter – 9

Decimal Numbers

(Complete chapter will be done in textbook)

Exercise- 3 (omit)

A decimal number can be defined as a number whose whole number part and the fractional part is separated by a decimal point. The dot in a decimal number is called a decimal point. The digits following the decimal point show a value smaller than one.



CONCEPTS SECTION

CONCEPTS SECTION

Tenths

There is another way of writing these fractions.

$\frac{2}{10}$ is written as **0.2**
It is read as 'zero point two'

$\frac{5}{10}$ is written as **0.5**
It is read as 'zero point five'

$\frac{7}{10}$ is written as **0.7**
It is read as 'zero point seven'



$1\frac{8}{10}$ is written as 1.8

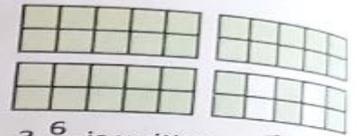
It is read as 'one point eight'

These are called **decimals** or **decimal numbers**.



$2\frac{4}{10}$ is written as 2.4

It is read as 'two point four'



$3\frac{6}{10}$ is written as 3.6

It is read as 'three point six'

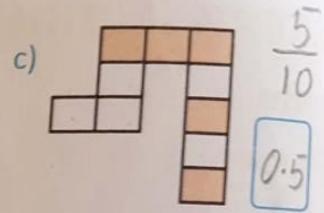
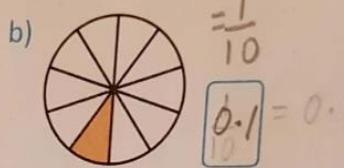
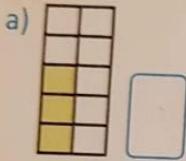
Parts of a decimal number

A decimal number has two parts separated by a decimal point.

3.6

EXERCISE 1

1. Write the coloured part as a decimal.



2. Write each fraction as a decimal.

a) $\frac{2}{10} =$ 0.2

b) $\frac{9}{10} =$ 0.9

c) $\frac{4}{10} =$

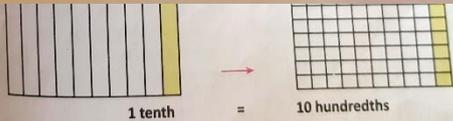
d) $\frac{7}{10} =$

e) $5\frac{2}{10} =$ 5.2

f) $3\frac{1}{10} =$

g) $12\frac{5}{10} =$ 12.5

h) $21\frac{8}{10} =$



In these decimals, the whole number part is 0. Therefore, they are less than 1.

3. Write as decimals.

a) $\frac{32}{100} =$ 0.32

b) $\frac{65}{100} =$

c) $13\frac{1}{100} =$ 13.01

d) $2\frac{9}{100} =$

4. Write as fractions.

a) 0.16 =

b) 0.23 = $\frac{23}{100}$

c) 0.03 =

d) 5.50 = $5\frac{50}{100}$

5. Write in words.

a) 0.25: zero point two five

b) 2.36: _____

c) 0.05: _____

d) 15.23: fifteen point two three



3. Write the decimals in words.

a) 0.2 = zero point two

c) 0.9 = _____

e) 6.5 = _____

b) 0.6 = _____

d) 0.7 = zero point seven

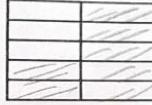
f) 19.3 = nineteen point three

4. Colour to show the decimal.

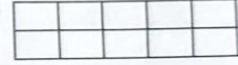
a) 0.2



b) 0.7



c) 0.5



5. Fill in the place value chart.

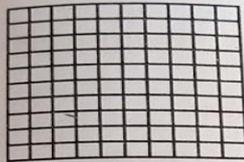
	Tens	Ones	.	tenths	
a)	0.5	0	.	5	
b)	2.8		.		
c)	15.6	1	5	.	6
d)	31.4				



EXERCISE 2

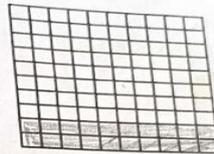
1. Colour to show the decimals.

a)



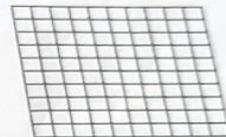
0.16

b)



0.20

c)



0.06

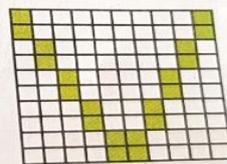
2. Write the shaded part as a fraction and as a decimal.

a)



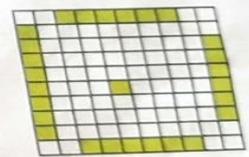
$$\frac{28}{100} = 0.28$$

b)



$$\frac{20}{100} = 0.20$$

c)



Exercise- 3 (omit)

Q.1. WRITE THE DECIMAL AS FRACTION (2 MARKS)

A) 0.08 =

B) 1.34 =

Q.2. WRITE EACH FRACTION AS DECIMAL.(2 MARKS)

A) $\frac{15}{10} =$

B) $\frac{7}{100} =$

Q.3 WRITE THE DECIMALS IN WORDS. (2 MARKS)

A) 2.08=

B) 0.03=

DELHI PUBLIC SCHOOL, GANDHINAGAR

CLASS : 4

SUBJECT: MATHS

Academic Session 2021-22

TERM-2

CHAPTER- 4

DIVISION

OMITTED PART:

- **EXERCISE-6**
- **EXERCISE-9**
- **EXERCISE-10**

- The **division** is a method of distributing a group of things into equal parts.
- Division is repeated subtraction.

TERMS USED IN DIVISION (NOTEBOOK)

Dividend \rightarrow $22 \div 5 = 4 \text{ R } 2$ \leftarrow Remainder
Divisor \uparrow \nwarrow Quotient

The number which is divided is called the **dividend**.

The number which divides is called the **divisor**.

The number which is the result of the division is called the **quotient**.

If there is any number left over, it is called the **remainder**.

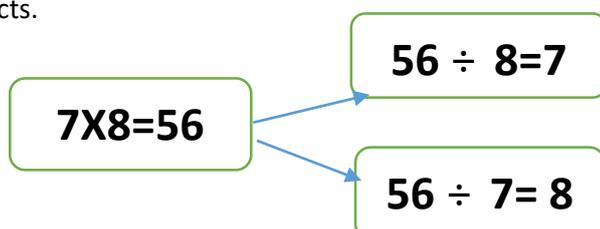
CHECK:

First check : remainder < divisor

Then, Quotient \times Divisor + Remainder = Dividend

PROPERTIES OF DIVISION (explanation)

1. Multiplication and Division are related. For each multiplication fact there are two division facts.



2. Division by itself:

If we divide a number by the number itself, the quotient is 1.

In other words, when any number is divided by the number itself, we always get 1 as the quotient.

For ex- $275 \div 275 = 1$

3. Division by 1

If we divide a number by 1 the quotient is the number itself.

In other words, when any number is divided by 1, we always get the number itself as the quotient.

For ex- $46 \div 1 = 46$

4. When 0 is divided by any number, the answer is always 0.

For ex- $0 \div 11 = 0$

Exercise- 1

Divide

b) $7346 \div 6$

	1	2	2	4
6	7	3	4	6
-	6			
	1	3		
-	1	2		
	0	1	4	
-		1	2	
		0	2	6
			2	4
			0	2

Q=1224, R=2

e) $9377 \div 9$

	1	0	4	1
9	9	3	7	7
-	9			
	0	3		
-		0		
	0	3	7	
-		3	6	
		0	1	7
			0	9
			0	8

Q=1041, R=8

Exercise- 2

Divide

a) $2487 \div 3$

		8	2	9
3	2	4	8	7
-	2	4		
	0	0	8	
-			6	
			2	7
			2	7
			0	0

Q=829, R=0

d) $2598 \div 8$

		3	2	3
8	2	5	8	9
-	2	4		
	0	1	8	
-		1	6	
			2	9
			2	4
			0	5

Q=323, R=5

Exercise-3

Q.1 Divide

a) $3054 \div 6$

		5	0	9
6	3	0	5	4
-	3	0	↓	↓
	0	0	5	↓
			0	↓
			5	4
	-		5	4
			0	0

Q=509, R=0

e) $6300 \div 9$

		7	0	0
9	6	3	0	0
-	6	3	↓	↓
	0	0	0	↓
			0	↓
			0	0
	-		0	0
			0	0

Q=700, R=0

e) $6335 \div 7$ (H.W)

Q.2 Divide

b) $5680 \div 8$

		7	1	0
8	5	6	8	0
-	5	6	↓	↓
	0	0	8	↓
			8	↓
			0	0
	-		0	0
			0	0

e) $6087 \div 4$

		1	5	2	1
4	6	0	8	7	
-	4	↓	↓	↓	
	2	0	↓	↓	
-	2	0	↓	↓	
	0	0	8	↓	
			8	↓	
			0	7	
				4	
				3	

l) $1248 \div 2$

		6	2	4
2	1	2	4	8
-	1	2	↓	↓
	0	0	4	↓
			4	↓
			0	8
				8
				0

H.W

C) $5123 \div 9$

G) $3839 \div 7$

Q.4 A factory produced 2348 markers in a day. These were packed 8 in a box. How many boxes were packed? How many markers were left over?

Solution:

Number of markers produced= 2348

Number of markers in a box=8

Number of boxes= $2348 \div 8$

		2	9	3
8	2	3	4	8
-	1	6	↓	↓
	0	7	4	↓
			2	↓
			2	8
			2	4
			0	4

Ans: 293 boxes were packed and 4 markers were left over.

Dividing by 10, 100 (EXPLANATION)

- When a **number** is divided by **10**, the digits, except the digit at the one's place, make the quotient and the digit at one's place becomes the remainder. Thus, when a **number** is divided by **10**, the remainder is always the digit of the unit place and the quotient is the **number** made by the remaining digits.
- When a **number** is divided by **100**, the digits, the digit in the tens and one's place becomes the remainder. The rest of the digits make up the quotient.

Exercise-4

Use the pattern to divide.

b) $230 \div 10$

		2	3
10	2	3	0
-	2	0	↓
		3	0
	-	3	0
		0	0

e) $4567 \div 10$

		4	5	6
10	4	5	6	7
-	4	0	↓	↓
		5	6	
	-	5	0	↓
		0	6	7
		-	6	0
			0	7

Exercise-5

Use the pattern to divide.

a) $689 \div 100$

			6
100	6	8	9
-	6	0	0
	0	8	9

d) $8090 \div 100$

			8	0
100	8	0	9	0
-	8	0	0	↓
	0	0	9	0
		-	0	0
			9	0

E) $3219 \div 100$ (H.W)

Exercise-6 (Omit)

EXERCISE-7

DIVIDE

B) $91 \div 17$

h) $125 \div 11$

		5	
17	9	1	
-	8	5	
	0	6	
	Q=5		
	R=6		

		1	1	
11	1	2	5	
-	1	1	↓	
	0	1	5	
	-	1	1	
		0	4	
		Q=11		
		R=4		

H.W

D) $90 \div 18$

G) $100 \div 13$

EXERCISE-8

DIVIDE

B) $544 \div 17$

D) $810 \div 18$

		3	2		
17	5	4	4		17
-	5	1	↓		34
	0	3	4		51
	-	3	4		68
		0	0		
		Q=32			
		R=0			

		4	5		
18	8	1	0		18
-	7	2	↓		36
	0	9	0		54
	-	9	0		72
		0	0		90
		Q=45			
		R=0			

E) $725 \div 14$

H) $847 \div 12$ (H.W)

		5	1		
14	7	2	5		14
-	7	0	↓		28
	0	2	5		42
	-	1	4		56
		1	1		70
		Q=51			
		R=11			

Exercise-9 omit

Exercise-10 omit

Mental Math (textbook)

DIVISION ACTIVITY (NOTEBOOK)

$5361 \div 4 = 1342$

	1000	300	40	2
4	$\begin{array}{r} 5368 \\ - 4000 \\ \hline 1368 \end{array}$	$\begin{array}{r} 1368 \\ - 1200 \\ \hline 0168 \end{array}$	$\begin{array}{r} 168 \\ - 160 \\ \hline 008 \end{array}$	$\begin{array}{r} 8 \\ - 8 \\ \hline 0 \end{array}$
	<u>1</u>	<u>3</u>	<u>4</u>	<u>2</u>

CHAPTER- 8
FRACTIONS

[Exercise-3 (Q.4 OMIT)]

[Ex-5, 6 – Word Problem (OMIT)]

What are fractions? (Explanation)

A fraction is a part of a whole number, and a way to split up a number into equal parts. It is written as the number of equal parts being counted, called the numerator, over the number of parts in the whole, called the denominator. These numbers are separated by a line.

Exercise-1(Notebook)

Q.1 Find

B) $\frac{3}{4}$ of 24

= $24 \div 4 = 6$

= 6×3

= 18

E) $\frac{5}{9}$ of 63 (H.W)

d) $\frac{3}{7}$ of 21

= $21 \div 7 = 3$

= 3×3

= 9

Q.2 Find

b) $\frac{2}{3}$ of an hour in minutes

1 hour = 60 minutes

= $\frac{2}{3}$ of 60

= $60 \div 3 = 20$

= 20×2

= 40 minutes

d) $\frac{3}{10}$ of a metre in centimetres

1 m = 100 cm

= $\frac{3}{10}$ of 100

= $100 \div 10 = 10$

= 10×3

= 30 centimetres

f) $\frac{2}{3}$ of a day in hours

1 day = 24 hours

= $\frac{2}{3}$ of 24

= $24 \div 3$

= 8×2

= 16 hours

c) $\frac{4}{7}$ of a week in days (H.W)

Q.4 Amla studied for $\frac{1}{12}$ of a day. For how many hours did she study?

Ans. 1 day = 24 hours

$\frac{1}{12}$ hours of a day = $\frac{1}{12}$ of 24

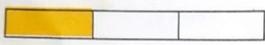
$24 \div 12 = 2$ hours

Ans. Amla studied for 2 hours

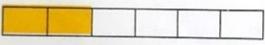
Exercise – 2 (Textbook)

EXERCISE 2

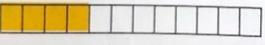
1. Observe the coloured parts and write the equivalent fractions.

a)  $\frac{1}{3}$

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

 $\frac{1}{3} = \frac{2}{6}$

 $\frac{2}{3} = \frac{4}{6}$

 $\frac{1}{3} = \frac{4}{12}$

 $\frac{2}{3} = \frac{8}{12}$

1. Observe the objects and write the equivalent fractions.

a)  $\frac{2}{3} = \frac{4}{6}$

 $\frac{3}{9} = \frac{1}{3}$

3. Observe the coloured portions and write the equivalent fractions.

a)  $\frac{2}{4} = \frac{1}{2}$

b)  $\frac{4}{8} = \frac{1}{2}$

c)  $\frac{3}{6} = \frac{1}{2}$

d)  $\frac{2}{4} = \frac{1}{2}$

4. Observe the coloured portions and write the equivalent fractions.

a)  $\frac{2}{4} = \frac{1}{2}$

b)  $\frac{3}{6} = \frac{1}{2}$

c)  $\frac{4}{8} = \frac{1}{2}$

d)  $\frac{6}{12} = \frac{1}{2}$

5. Colour the parts to show the equivalent fractions.

a)  $\frac{1}{3} = \frac{2}{6}$

b)  $\frac{2}{4} = \frac{4}{8}$

Finding equivalent fractions (Explanation)

By Multiplication

- To get equivalent fraction of a fraction, multiply the numerator and denominator of the fraction by the same number.

- For ex- Find three equivalent fraction of $\frac{2}{5}$.

$$\frac{2}{5} \times \frac{2}{2} = \frac{4}{10} \quad \frac{2}{5} \times \frac{3}{3} = \frac{6}{15} \quad \frac{2}{5} \times \frac{4}{4} = \frac{8}{20}$$

By Division

To get equivalent fraction of a fraction, divide the numerator and denominator of the fraction by the same number.

For ex- $\frac{4}{8} \div \frac{2}{2} = \frac{2}{4}$ and $\frac{4}{8} \div \frac{4}{4} = \frac{1}{2}$

Exercise- 3 (Notebook)

Q.1 Find the first four equivalent fractions by multiplication.

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

$$\frac{2}{3} \times \frac{2}{2} = \frac{4}{6}$$

$$\frac{2}{3} \times \frac{3}{3} = \frac{6}{9}$$

$$\frac{2}{3} \times \frac{4}{4} = \frac{8}{12}$$

$$\frac{2}{3} \times \frac{5}{5} = \frac{10}{15}$$

d) $\frac{3}{5}$

$$\frac{3}{5} \times \frac{2}{2} = \frac{6}{10}$$

$$\frac{3}{5} \times \frac{3}{3} = \frac{9}{15}$$

$$\frac{3}{5} \times \frac{4}{4} = \frac{12}{20}$$

$$\frac{3}{5} \times \frac{5}{5} = \frac{15}{25}$$

Q.2 Find two equivalent fractions by division.

A) $\frac{9}{18}$

$$\frac{9}{18} \div \frac{9}{9} = \frac{1}{2}$$

$$\frac{9}{18} \div \frac{3}{3} = \frac{3}{6}$$

c) $\frac{12}{18}$

$$\frac{12}{18} \div \frac{2}{2} = \frac{6}{9}$$

$$\frac{12}{18} \div \frac{3}{3} = \frac{4}{6}$$

Q.3 Fill in the blanks to make the fractions equivalent.

b) $\frac{1}{5} = \frac{\quad}{15}$

$$\frac{1}{5} \times \frac{3}{3} = \frac{3}{15} \quad \frac{1}{3} \times \frac{7}{7} = \frac{7}{21}$$

d) $\frac{1}{3} = \frac{\quad}{21}$

e) $\frac{2}{7} = \frac{\quad}{21}$

$$\frac{2}{7} \times \frac{3}{3} = \frac{6}{21}$$

d) $\frac{4}{9} = \frac{36}{\quad}$ (H.W)

Q.4 Omit

Like and unlike fractions (MARK IN TEXTBOOK)

The fractions with the same denominators are called like fractions.

Ex- $\frac{1}{5}, \frac{3}{5}, \frac{5}{5}$

The fractions with different denominators are called unlike fractions.

Ex- $\frac{3}{7}, \frac{1}{5}$

Exercise-4 (TEXTBOOK)

Q.1 Put a ✓ for like and X for unlike fractions.

b) $\frac{2}{8}, \frac{1}{8}$ ✓

c) $\frac{1}{2}, \frac{2}{4}$ X

Q.2 Compare the fractions. Fill in the blanks with <, > or =.

b) $\frac{6}{7} > \frac{3}{7}$

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

h) $\frac{1}{2} < \frac{2}{2}$

Q.3 Arrange in ascending order.

b) $\frac{4}{7}, \frac{3}{7}, \frac{7}{7}, \frac{1}{7}$

c) H.W

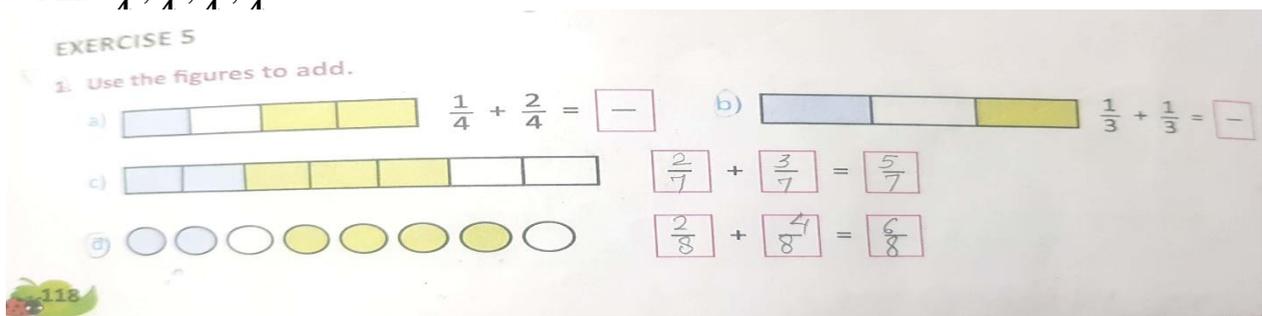
Ans. $\frac{1}{7}, \frac{3}{7}, \frac{4}{7}, \frac{7}{7}$

Q.4 Arrange in descending order.

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

c) H.W

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

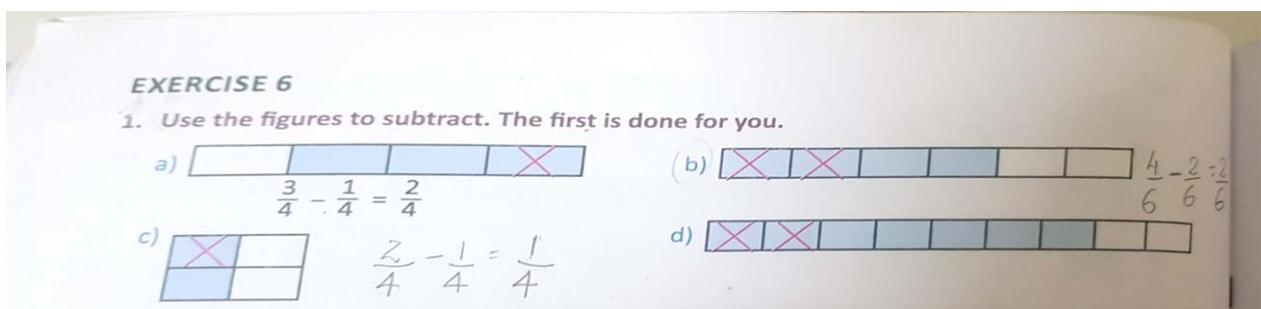


Q.2

c) $\frac{3}{6} + \frac{2}{6} = \frac{5}{6}$

i) $\frac{6}{12} + \frac{2}{12} = \frac{8}{12}$

j) $\frac{8}{11} + \frac{2}{11}$ (H.W)



Q.2 Subtract.

$$d) \frac{9}{12} - \frac{3}{12} = \frac{6}{12}$$

$$g) \frac{3}{4} - \frac{1}{4} = \frac{2}{4}$$

$$i) \frac{3}{5} - \frac{9}{12} \text{ (H.W)}$$

Proper, Improper and Mixed fractions (MARK IN TEXTBOOK)

Proper Fractions:

The numerator is smaller than the denominator

Examples: $\frac{1}{3}$, $\frac{3}{4}$, $\frac{2}{7}$

Improper Fractions:

The numerator is greater than (or equal to) the denominator

Examples: $\frac{4}{3}$, $\frac{11}{4}$, $\frac{7}{7}$

Mixed Fractions:

A number with a whole number part and a fraction part together is known as mixed fractions.

Examples: $1\frac{1}{3}$, $2\frac{1}{4}$, $16\frac{2}{5}$

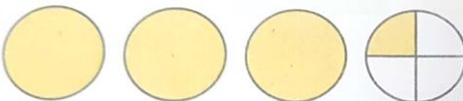
Unit Fractions:

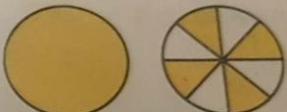
Proper Fractions with 1 as numerator are called unit fractions.

EXERCISE-7

EXERCISE 7

1. Write the improper fractions and mixed numbers for the following.

a)  $1 + 1 + 1 + \frac{1}{4} = \frac{13}{4} = 3\frac{1}{4}$

b)  $1\frac{4}{8}$

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Q.2 Convert the improper fractions into mixed numbers.

$$\text{a) } \frac{5}{2}$$

$$\text{Mixed number} = \text{Quotient} \frac{\text{Remainder}}{\text{Denominator}} = 2 \frac{1}{2}$$

$$\text{c) } \frac{15}{8}$$

$$Q \frac{R}{D} = 1 \frac{7}{8}$$

$$\text{f) } \frac{27}{9}$$

$Q \frac{R}{D} = 3$ (If numerator is a multiple of the denominator, the fraction represents a whole number.)

Q.3 Convert the mixed numbers into improper fractions.

$$\text{a) } 4 \frac{1}{3}$$

$$(Q \times D) + R$$

$$(4 \times 3) + 1 = \frac{13}{3}$$

$$\text{b) } 9 \frac{3}{4}$$

$$(Q \times D) + R$$

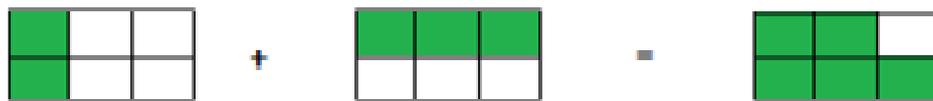
$$(9 \times 4) + 3 = \frac{39}{4}$$

$$\text{f) } 6 \frac{2}{3}$$

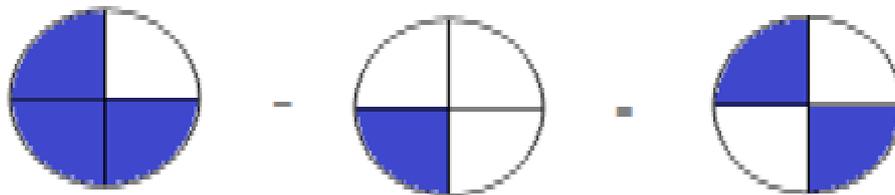
$$(Q \times D) + R$$

$$(6 \times 3) + 2 = \frac{20}{3}$$

A1L 3 ACTIVITY



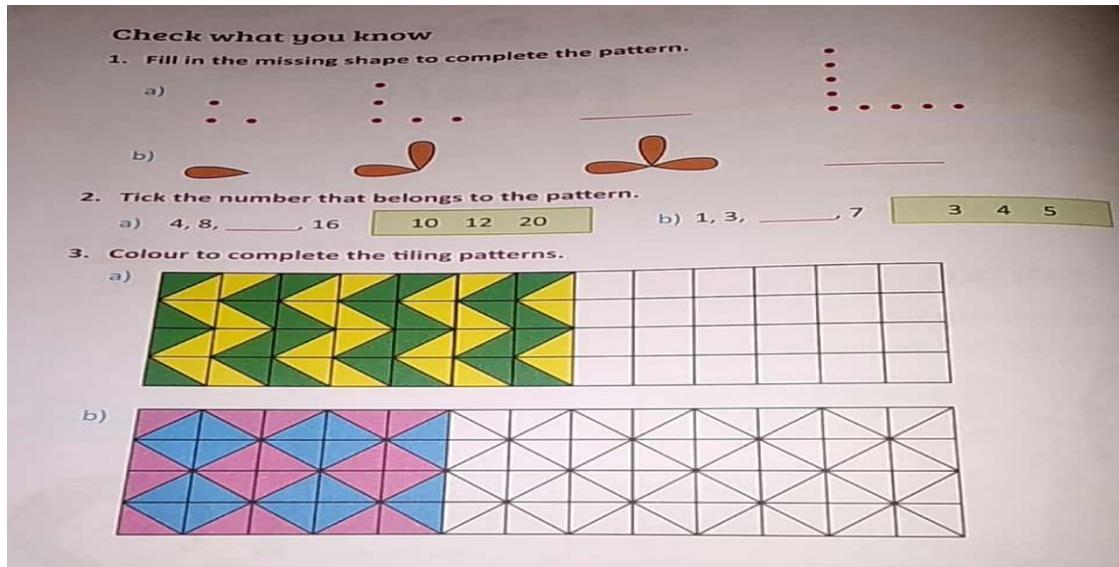
$$\frac{2}{6} + \frac{3}{6} = \frac{5}{6}$$



$$\frac{3}{4} - \frac{1}{4} = \frac{2}{4}$$

CLASS 4 (SESSION 2021-22)

CHAPTER-7 SYMMETRY AND PATTERN

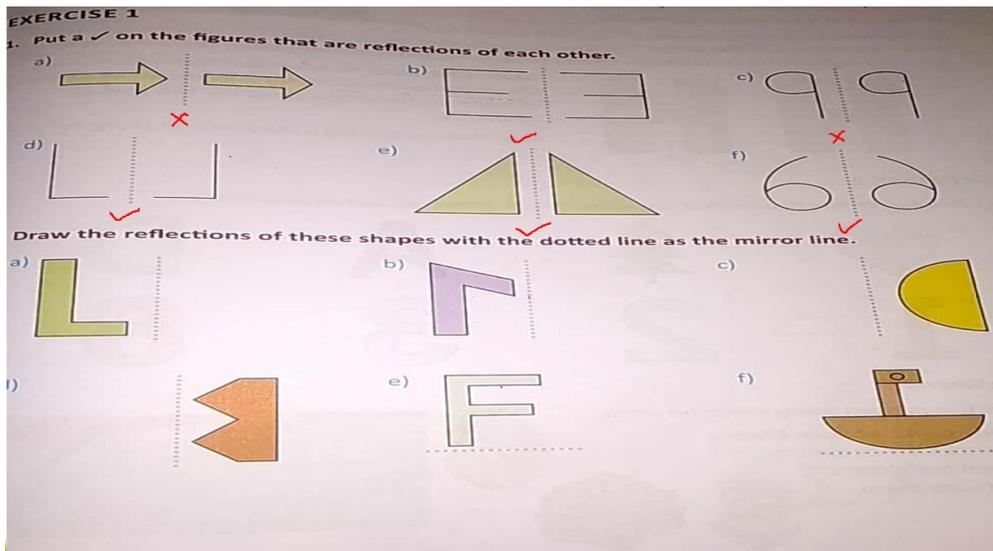


REFLECTION OR MIRROR SYMMETRY (Explanation)

- ▶ Reflection symmetry can also be called as mirror symmetry.
- ▶ In some cases the reflection is different from the shape whereas in some cases they are similar.
- ▶ A *Reflectional Symmetry* is a type of symmetry in which one half of the object is the mirror image of the other. A figure may have both horizontal and vertical lines of reflection.



- ▶ The line symmetry is closely related to mirror reflection.
- ▶ When dealing with mirror reflection, we have to take into account the left and right changes in orientation.
- ▶ Alphabets written from right to left, appear written from left to right in their mirror image.
- ▶ Symmetry has plenty of applications in everyday life as in art, architecture, textile technology, design creations, geometrical reasoning, Rangoli etc.

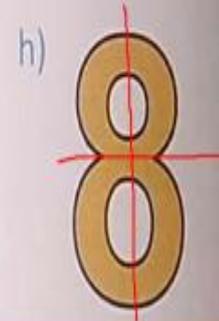
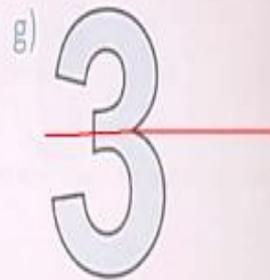
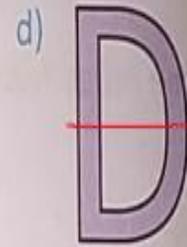
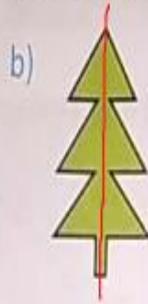
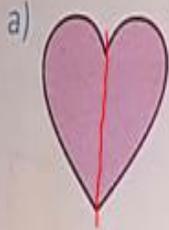


SYMMETRY AND REFLECTION SYMMETRY (Explanation)

- ▶ The line that divides a figure into two identical parts is called the Axis or line of symmetry.
- ▶ Line of symmetry can be
 - A) Horizontal
 - B) Vertical
 - C) Diagonal
 - D) It can be one, two or many line of symmetry.
 - E) Along with the shapes inner colors or design is also be noted while drawing line of symmetry

EXERCISE 2

1. Put a ✓ on the figures that are symmetrical. Draw the line of symmetry.



DELHI PUBLIC SCHOOL, GANDHINAGAR

CLASS : 4

SUBJECT: MATHS

Academic Session 2020-21

CHAPTER-5

MULTIPLES AND FACTORS

A multiple of a number is formed by multiplying the number by 1,2,3,4,5

For ex- Multiples of 3

3,6,9,12,15

Properties of multiples {Explanation}

Property (1):

Every number is the multiple of itself

Property (2):

Every number is the multiple of 1.

Property (3) :

Every multiple except zero is either equal to or greater than any of its factors.

As, multiple of 7 = 7, 14, 28, 35, 77,, etc.

Property 4:

A number has an uncountable number of multiples . There is no largest multiple of a number.

Exercise- 1 (Notebook)

Q. 1 Fill in the blanks.

a) 12 is a multiple of 3. It is also a multiple of 1, 12, 2, 4 and 6.

c) The number is 30 or 60 or 120 is a multiple of both 5 and 6.

e) The number 30 or 60 is a multiple of 2, 3 and 5.

f) The smallest multiple of 21 is 21.

Finding the multiples of a number (explanation)

- To find the multiples of a number, multiply the number by 1, 2,3 ,4 ,5

Example- The first 5 multiples of 8 are

$$8 \times 1 = 8$$

Exercise- 2(Notebook)

Q.1 Find the first multiples of :

- b) 9 – 9,18,27,36,45.
 e) 15- 15,30,45,60,75.
 f) 20- self practice

Q.2 Check if the first number is a multiple of the second number.

b) 64,8

$$64 \div 8 = 8$$

Since there is no remainder, 64 is a multiple of 8.

c) 73,9

$$73 \div 9 = 8, \text{ Remainder} = 1$$

Since there is a remainder, 73 is not a multiple of 9.

		8
9	7	3
	7	2
	0	1

Q.3 Write the multiples of:

b) 15 that are smaller than 50.

Ans. 15,30,45

c) 20 that are between 75 and 125

Ans. 80,100,120.

Q.4 Ring or underline the numbers that are multiples of both 1 and 2

1, 2, 4, 5, 8, 10, 15, 16, 18, 20

Q.5 Ring the numbers that are multiples of both 3 and 5.

1, 2, 3, 4, 5, 9, 12, 15, 18, 20

Common multiples

Exercise-3 (notebook)

Q.1 In Textbook

Q.2 List the first 10 multiples of each number and find the common multiples.

a) 3 and 5

Multiples of 3- 3, 6,9,12,15,18,21,24,27,30

Multiples of 5- 5,10,15,20,25,30,35,40,45,50

Common multiples= 15, 30

d) 6 and 8

Multiples of 6- 6,12,18,24,30,36,42,48,54,60

Multiples of 8- 8,16,24,32,40,48,56,64,72,80

Common multiples- 24, 48

What are Factors? (Explanation)

- ❖ A factor of a number divides the number without leaving a remainder.
- ❖ The factors of a number can be found by multiplication or division.
- ❖ Eg :The factors of 6 by multiplication: 1, 2, 3 and 6
- ❖ $1 \times 6 = 6$
- ❖ $2 \times 3 = 6$
- ❖ $3 \times 2 = 6$ STOP

Properties of Factors (explanation)

- 1 is the **factor** of every number.
- Every number is the **factor** of itself.
- A number has a limited number of **factors**.
- The **smallest factor** of a number is 1.
- The **biggest factor** of a number is the number itself..
- A **factor of a number** is **either smaller than or equal** to the number.

Exercise-4 (notebook)

1. $8 \times 9 = 72$

Therefore, 8 and 9 are factors of 72.

72 is a multiple of 8 and 9.

2. Which number has only 1 factor? 1

3. Which is the:

Smallest factor of 425? 1

Greatest factor of 425? 425

4. Is 2 a factor of an odd number? No

Exercise-5 (notebook)

Q.2 Find the factors by multiplication.

a) 14

$$1 \times 14 = 14$$

$$2 \times 7 = 14$$

$$7 \times 2 = 14 \text{ (STOP)}$$

The factors of 14 are 1, 2, 7 and 14

(f) 35

$$1 \times 35 = 35$$

$$5 \times 7 = 35$$

$$7 \times 5 = 35 \text{ (STOP)}$$

The factors of 35 are 1, 5, 7 and 35

g) 36

$$1 \times 36 = 36$$

$$2 \times 18 = 36$$

$$3 \times 12 = 36$$

$$4 \times 9 = 36$$

5 × Not possible

$$6 \times 6 = 36$$

7 × N.P

8 × N.P

$$9 \times 4 = 36$$

The factors of 36 are 1, 2, 3, 4, 6, 9, 12, 18 and 36.

(c) 16 (H.W)

Q.3 Find the factors by division.

a) 18

$$18 \div 1 = 18$$

$$18 \div 2 = 9$$

$$18 \div 3 = 6$$

$$18 \div 4 = \text{N.P}$$

$$18 \div 5 = \text{N.P}$$

$$18 \div 6 = \text{stop}$$

The factors of 18 are 1, 2, 3, 6, 9 and 18

c) 25

$$25 \div 1 = 25$$

$$25 \div 2 = \text{N.P}$$

$$25 \div 3 = \text{N.P}$$

$$25 \div 4 = \text{N.P}$$

$$25 \div 5 = 5$$

The factors of 25 are 1, 5, 25

e) 93

$$93 \div 1 = 93$$

$$93 \div 2 = \text{N.P}$$

h) 28 – H.W

$$93 \div 3 = 31$$

$$93 \div 4 = \text{N.P}$$

$$93 \div 5 = \text{N.P}$$

$$93 \div 6 = \text{N.P}$$

$$93 \div 7 = \text{N.P}$$

The factors of 93 are 1,3

31 and 93.

Q.4 Check if the second number is a factor of the first number. Write Y for yes or N for no.

a) 20,5 $20 \div 5 = 4$, remainder=0 Therefore, 5 is a factor of 20.	e) 50,7 $50 \div 7 = 7$, remainder=1 Since there is remainder so 7 is not a factor of 50.
G) 45,0 $45 \div 0 = 0$, remainder=45 Therefore, 0 is not a factor of 45.	h) 81,1 $81 \div 1 = 81$ Therefore, 1 is a factor of 81. H.W- I

Common factors
Exercise-6 (notebook)

Q.1 Find the factors of the numbers. Then list the common factors.

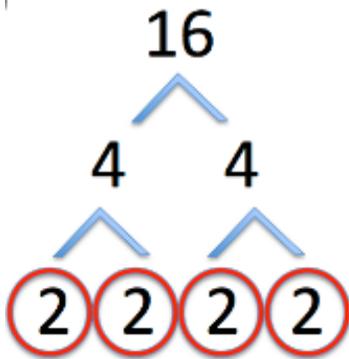
a) 4, 8

Factors of 4 $1 \times 4 = 4$ $2 \times 2 = 4$ $4 \times 1 = \text{STOP}$	Factors of 8 $1 \times 8 = 8$ $2 \times 4 = 8$ $4 \times 2 = \text{STOP}$
Factors of 4 = 1,2,4	Factors of 8 = 1,2,4,8
Common factors of 4 and 8 are 1,2,4	

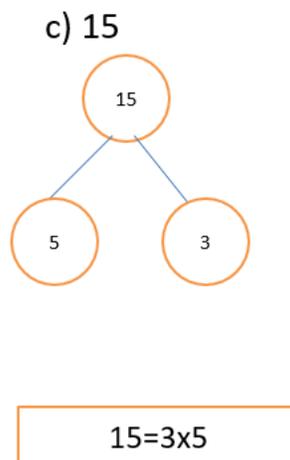
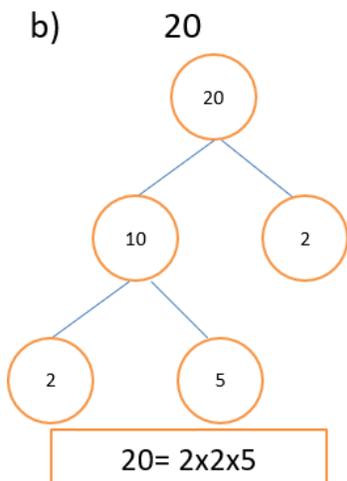
d) 14,21

Factors of 14 $1 \times 14 = 14$ $2 \times 7 = 14$ $7 \times 2 = \text{STOP}$	Factors of 21 $1 \times 21 = 21$ $3 \times 7 = 21$ $7 \times 3 = \text{STOP}$
Factors of 4 = 1,2,7,14	Factors of 8 = 1,3,7,21
Common factors of 14 and 21 are 1,7	
H.W- E and F	

Q.2 Complete the factor tree of 16.



Q.3 Make factor tree for the following.



Tests of divisibility (explanation)

- **Divisibility by 2**

Every number that ends in even number i.e. 0,2,4,6 or 8 is divisible by 2.

Example: 26, 92, 104, 200, 398 etc

- **Divisibility by 3**

If the sum of the digits of the given number is divisible by 3, then the given number is also divisible by 3.

Example: 414

Sum of the digits of 414 = $4 + 1 + 4 = 9$

9 is divisible by 3 ($9 \div 3 = 3$). So, 414 is also divisible by 3.

- **Divisibility by 5**

Number that ends in 5 or 0 is divisible by 5.

Example: 165

Here last digit is 5. So, 165 is divisible by 5

- **Divisibility by 9**

Given number is divisible by 9, if the sum of the all the digits of given number is divisible by 9.

Example: 2016

Sum of the digit = $2 + 0 + 1 + 6 = 9$

9 is divisible by 9. So, 2016 is divisible by 9

- **Divisibility by 10**

Any number that ends in 0 is divisible by 10.

Example: 3670

As number ends in 0. So, 3670 is divisible by 10

Exercise-7 (Note-book)

Write yes if divisible and no if not divisible.

	Divisible by				
Number	2	3	5	9	10
a) 90	Y	Y	Y	Y	Y
c) 75	N	Y	Y	N	N

e)81	N	Y	N	Y	N
f)63	N	Y	N	Y	N
h)135	N	Y	Y	Y	N

Mental Maths (note-book)

1. The number 1 is a factor of every number.
2. Is there one number that is a multiple of every number? NO
4. The smallest factor of 9 is 1.
7. 25 is the smallest multiple of 25.
10. Is 35 a common multiple of 3 and 5? NO
12. Is 234567895 divisible by 5? YES

CHAPTER 6 GEOMETRY

Check what you know

1. Count and write the number of horizontal, vertical, slanting and curved lines in each figure.

a) 

Horizontal lines: _____
Vertical lines: _____
Slanting lines: _____
Curved lines: _____

b) 

Horizontal lines: _____
Vertical lines: _____
Slanting lines: _____
Curved lines: _____

c) 

Horizontal lines: _____
Vertical lines: _____
Slanting lines: _____
Curved lines: _____

2. Name the shapes. Count the number of faces, edges and corners each has.

a) 

Shape: _____
Straight faces: _____
Curved faces: _____
Straight edges: _____
Curved edges: _____
Corners: _____

b) 

Shape: _____
Straight faces: _____
Curved faces: _____
Straight edges: _____
Curved edges: _____
Corners: _____

c) 

Shape: _____
Straight faces: _____
Curved faces: _____
Straight edges: _____
Curved edges: _____
Corners: _____

d) 

Shape: _____
Straight faces: _____
Curved faces: _____
Straight edges: _____
Curved edges: _____
Corners: _____

CONCEPT SECTION:

➤ **LINE:**

- A line segment extending endlessly on both sides is called line.

- It is written as Line XY or \overleftrightarrow{XY}



➤ **RAY:**

- A ray is a part of a line. It starts at a point and extends endlessly on one side.

- It is written as Ray OA or \overrightarrow{OA}



O

A

➤ **POINT:**

- A point is a very small dot made with a sharp pencil.
- It is written as point A

. A

➤ **LINE SEGMENT:**

- A line segment is the straight path between two points.
- It is written as line segment AB or \overline{AB}



EXERCISE 1 (TEXT BOOK)

It is shown with an arrow on one end.

EXERCISE 1

1. Name these.

a) b) c)

Ray OA or OA Line segment PQ or PQ Line XY or XY

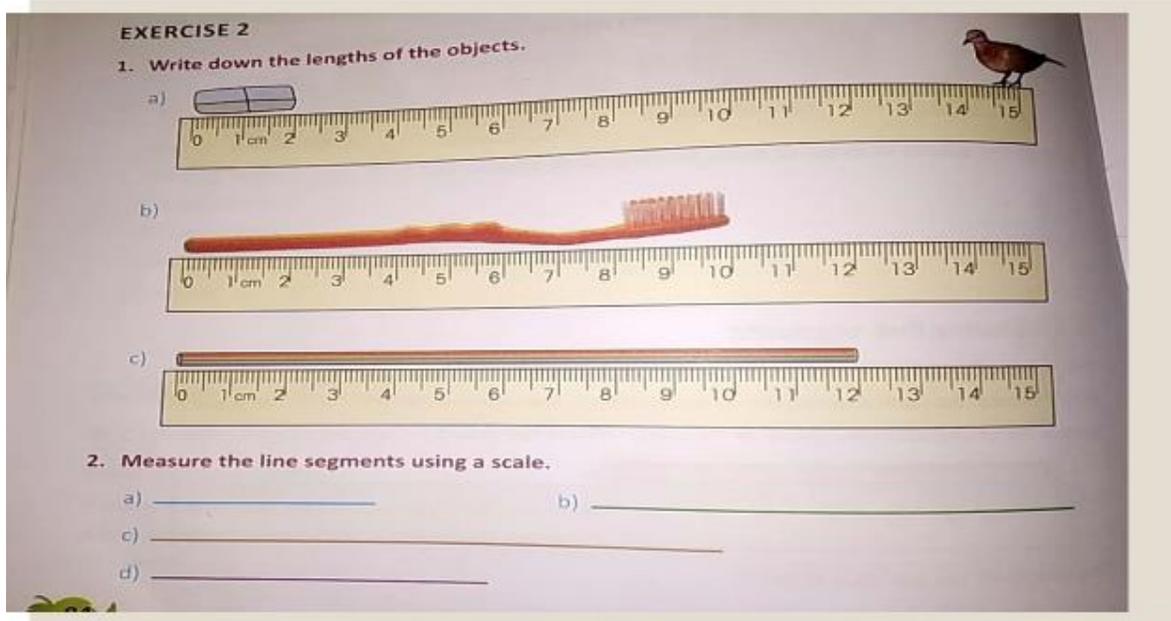
2. Count and write the number of corners and line segments in each figure.

a) b) c) d)

3. Join the points to draw as many line segments as you can.

a) b)

EXERCISE 2 (TEXT BOOK)



EXERCISE 3 (NOTEBOOK)

Q.1 Draw line segments of the following lengths. (Note book)

a) 12 cm

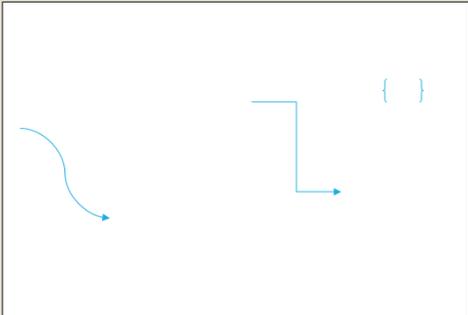
c) 8cm

e) 9 cm

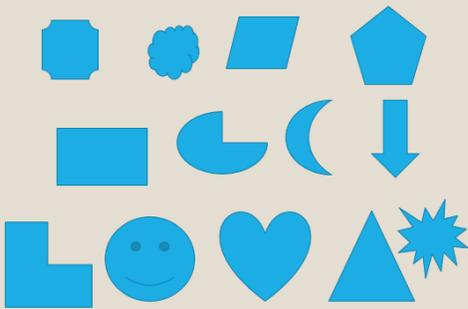
CLOSED FIGURES (EXPLANATION)

CLOSED FIGURES

OPEN FIGURES



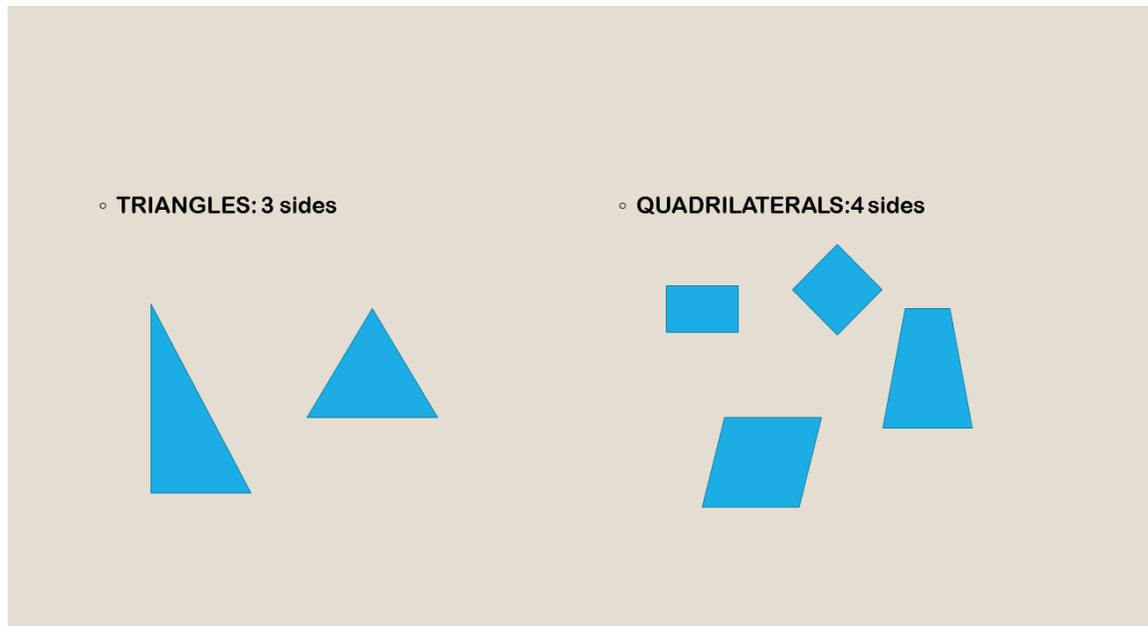
CLOSED FIGURES



POLYGONS:

◦ The closed figures which are made up of straight line segments are called polygons.

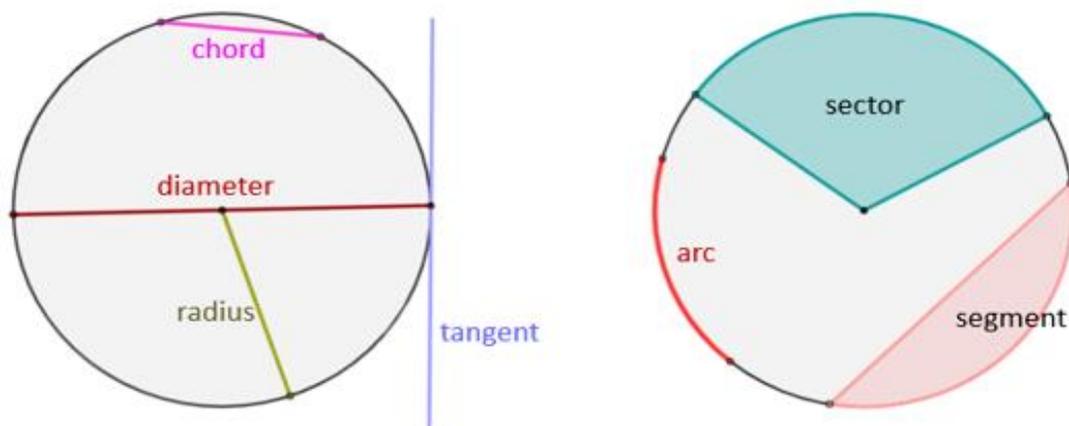




PARTS OF A CIRCLE (NOTE BOOK)

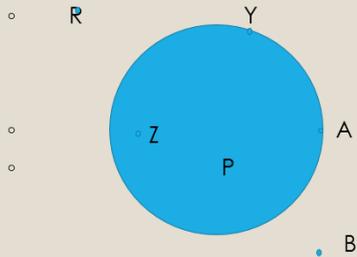
- Students will draw 4 circles using bangle and cut it.
- **DIAMETER** : A line segment joining two points on a circle and passing through the centre is a diameter of the circle.
- **RADIUS**: Any line from the centre to the circle is a radius of the circle.
- **CENTRE**: The point exactly at the centre of the circle is the centre of the circle.
- **CIRCUMFERENCE**: The length around the circle is called its Circumference.

Parts of a Circle



INTERIOR, EXTERIOR AND ON THE CIRCLE (EXPLANATION)

INTERIOR, EXTERIOR AND ON THE CIRCLE



◦ LOOK AT THE CIRCLE:

INTERIOR POINTS: Z , P

EXTERIOR POINTS: R , B

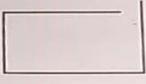
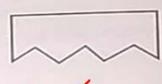
ON THE CIRCLE: A , Y

EXERCISE 4 TEXT BOOK

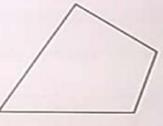
Rectangles Squares

EXERCISE 4

1. Identify the closed figures. Colour them.

a)  b)  c)  d) 

2. Identify the polygons. Colour them. ✓

a)  b)  c)  d) 

3. Draw the following in your note book. ✓

a) A triangle b) A rectangle
c) A square d) A quadrilateral that is neither a rectangle nor a square.

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EXERCISE 5 (TEXT BOOK)

EXERCISE 5

1. Fill in the blanks.

- a) A circle is a closed (closed/open) figure.
- b) A circle does not (does/does not) have straight sides.
- c) If the radius of a circle is 3 cm, its diameter is 6 cm, and the distance from the centre of the circle to a point on the circle is 3 cm.
- d) If the diameter of a circle is 10 cm, its radius is 5 cm, and the distance from the centre of the circle to a point on the circle is 5 cm.
- e) In a circle of diameter 16 cm, the distance between the centre of the circle and a point on the circle is 8 cm.



EXERCISE 6 (TEXT BOOK)

EXERCISE 6

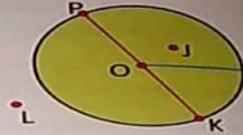
1. Label the parts of this circle—centre, radius, diameter.

2. Fill in the blanks with inside, outside and on.

Point J: inside the circle

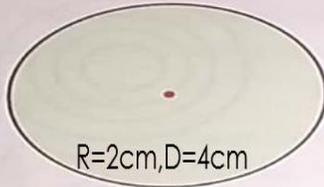
Point K: on the circle

Point L: outside the circle

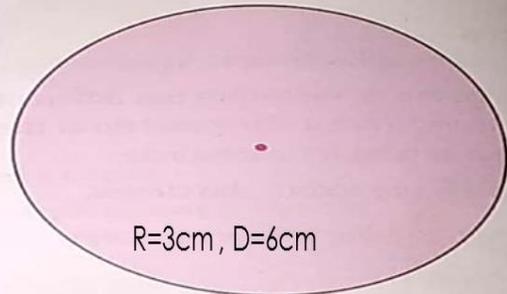


3. Measure the radius of the circle. Find the diameter by calculation.

a)

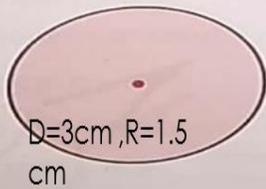


b)

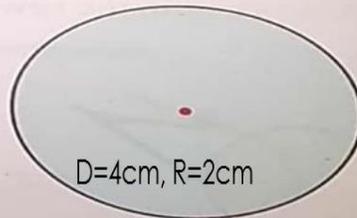


4. Measure the diameter of the circle. Find the radius by calculation.

a)



b)



WORKSHEET (TEXT BOOK)

WORKSHEET

1. Identify the following figures. a) Point b) Line segment c) Ray d) line [A]

2. Draw:
a) a line 
b) a ray 

3. Identify the centre, radius and diameter of the circle.
a) centre O b) radius OB or OA c) diameter OC 

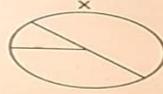
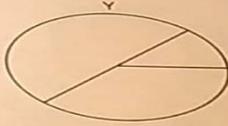
4. What will be the diameter of a circle if the radius is 12 cm? 24 cm (12 x 2)

1. Identify the closed and open figures. [B]

a)  closed b)  closed c)  open d)  open

2. Draw a line segment AB of length 5 cm.

3. Measure the radius and diameter of the given circles.

X: _____ 
Y: _____ 

Two of the following are true. Identify them.

a) Diameter $\times 2 =$ radius **FALSE** b) Radius $\div 2 =$ diameter **FALSE**
c) Diameter $\div 2 =$ radius **TRUE** d) Radius $\times 2 =$ diameter **TRUE**

1. Identify the polygons in the following figures.

a)  b)  c)  d) 

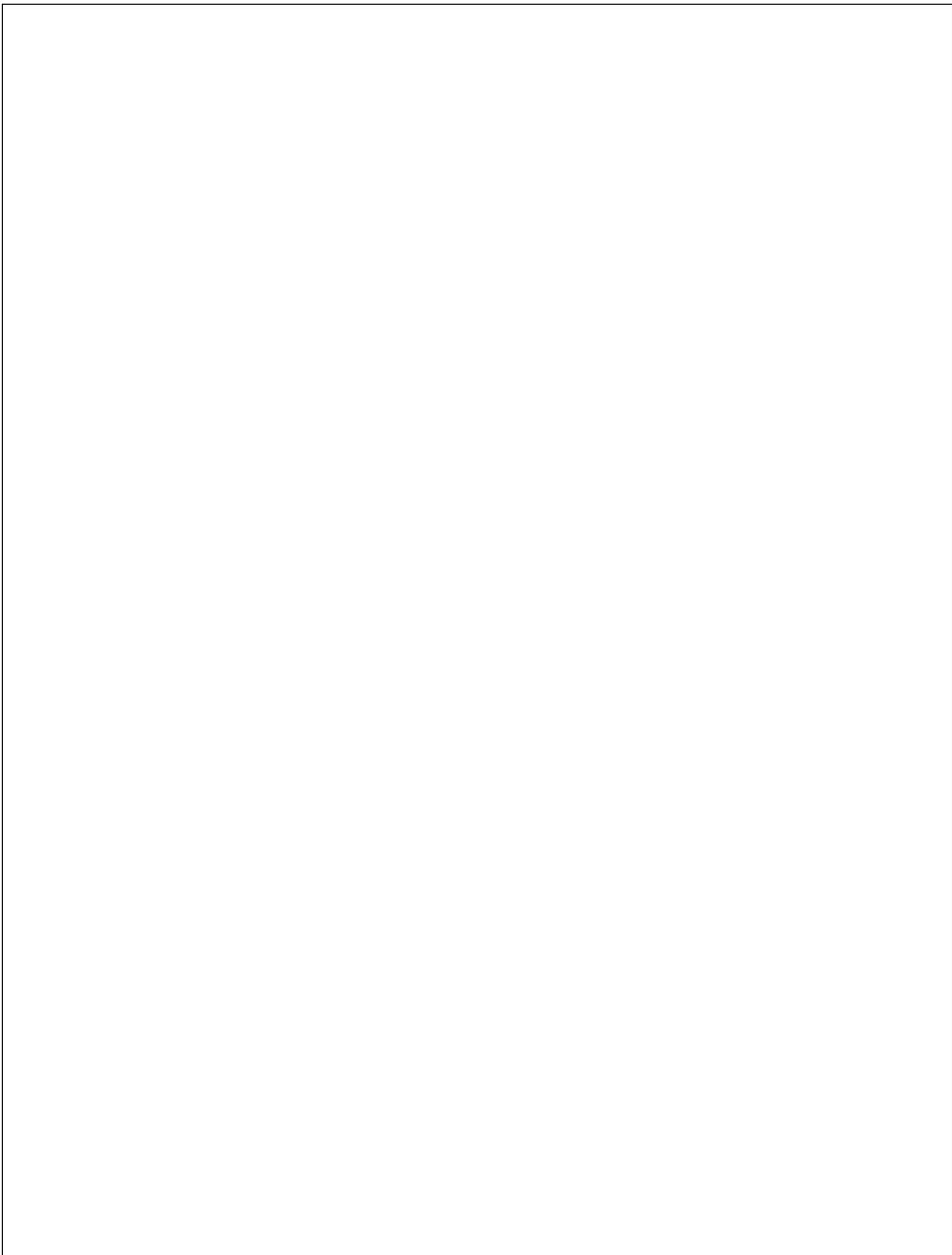
2. Draw a rectangle ABCD of sides AB = 4 cm, BC = 3 cm.



3. Draw a circle with radius 5.5 cm. Measure its diameter.
Diameter = _____

a) What is the circumference of a circle?
The length around a circle is called its circumference.

b) Is it longer than, shorter than or of the same length as the diameter of the circle?
It is longer than the diameter.



CHAPTER 14 HANDLING DATA

What is data?

A collection of facts, such as numbers, words, measurements, observations or even just descriptions of things.

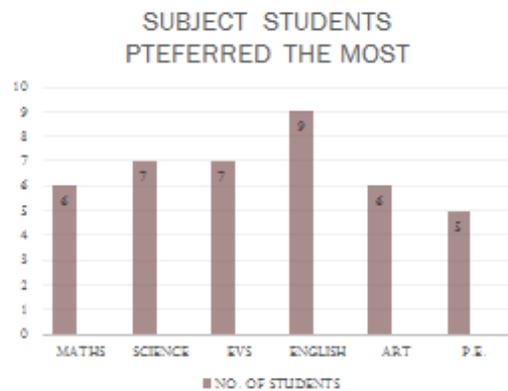
BAR GRAPH

Q2-Draw the bar graph to show the results of Pinku's survey.(See Page no 207)

DATA TABLE

SUBJECT	NO. OF STUDENTS
MATHS	6
SCIENCE	7
EVS	7
ENGLISH	9
ART	6
P.E.	5

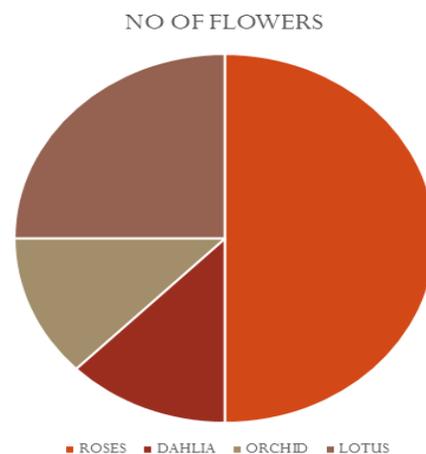
BAR GRAPH



CIRCLE CHART

Q3.The number of flowers of each kind sold from shop as shown.

FLOWER	NO OF FLOWERS
ROSES	60
DAHLIA	15
ORCHID	15
LOTUS	30



DELHI PUBLIC SCHOOL, GANDHINAGAR

CLASS :4

SUBJECT: MATHS

Academic Session 2021-22

CHAPTER- 3

MULTIPLICATION

➤ **CONCEPT SECTION : (MARK IN TEXTBOOK)**

- Multiplication of a whole number is repeated addition.
- In the multiplication fact,

$$\begin{array}{rcccccc} 7 & \times & 5 & = & 35 \\ \text{Multiplicand} \times & \text{Multiplier} & = & \text{Product} \end{array}$$

➤ **PROPERTIES OF MULTIPLICATION: (PG NO. 37)**

- 1) Two numbers can be multiplied in any order. The product remains the same.

Eg: $6 \times 8 = 48$ or $8 \times 6 = 48$

- 2) Three or more numbers being multiplied together can be grouped in any way. The product remains the same.

Eg : $6 \times (2 \times 5) = 60$ or $(6 \times 2) \times 5 = 60$

- 3) The product of 1 and any number is the number itself.

Eg : $8 \times 1 = 8$

- 4) The product of 0 and any number is 0.

Eg: $7 \times 0 = 0$

EXERCISE-1 (CHECK YOUR ANSWER)

1.Fill in the blanks using the properties of multiplication.

- a) $324 \times 1 = 324$
- b) $123 \times 0 = 0$
- d) $190 \times 10 = 10 \times 190$
- e) $(34 \times 46) \times 12 = 34 \times (46 \times 12)$
- g) $0 \times 0 = 0$
- h) $1 \times 1 = 1$
- i) $650 \times 0 = 0$

EXERCISE-2(CHECK YOUR ANSWER)

1 Multiply :

a) $255 \times 10 = 2,550$

b) $255 \times 100 = 25,500$

c) $305 \times 20 = 6,100$

d) $115 \times 300 = 34,500$

e) $22 \times 1000 = 22000$

f) $12 \times 6000 = 72,000$

h) $45 \times 4000 = 1,80,000$

EXERCISE-3 (NOTEBOOK)

Q-1 MULTIPLY

a)

2	3	0	4
×			3
6	9	1	2

d)

	1	4	2	
	5	2	8	4
	×			5
2	6	4	2	0

f)

	1		4	
	5	2	0	6
	×			8
4	1	6	4	8

g) H.W

	3	4	0	9
	×			7

WORD PROBLEM: (NOTEBOOK)

Q.2 The distance from Delhi to Mumbai is 1432 km. If I go from Delhi to Mumbai and come back, How much distance have I covered?

Solution:

Distance from Delhi to Mumbai= 1432 km
 Distance from Mumbai to Delhi= + 1432 km
 Total distance covered by me 2864km

Ans: Total distance covered by me is 2864 km

Exercise- 4 (Notebook)

Q.1 Multiply

a)

			1	9	4
		×		3	3
			5	8	2
	+	5	8	2	0
		6	4	0	2

b)

			2	0	8	
		×		6	4	
			8	3	2	
	+	1	2	4	8	0
		1	3	3	1	2

e) 576x48 (H .W)

WORD PROBLEM:

a) In a farm, 240 potato plants are planted in a row. If there are 24 such rows, how many potato plants are there?

Solution:

Plants in a row = 240

Plants in 24 such rows = 240×24
 $= 5,760$

Ans-There are 5,760 plants in all.

			1	
		2		4
x		2		4
		9		6
+	4	8		0
	5	7		6

EXERCISE-5 (NOTEBOOK)

b)

				7	4	6
		×		1	2	3
			2	2	3	8
		1	4	9	2	0
+		7	4	6	0	0
		9	1	7	5	8

c)

				3	4	7
		×		8	0	2
				6	9	4
			0	0	0	0
+	2	7	7	6	0	0
	2	7	8	2	9	4

WORD PROBLEM:

a) A book has 264 pages. How many pages do 110 such books have?

Solution:

Number of pages in a book = 264

Number of pages in 110 such books = 264×110
29,040

Ans: There are total 29,040 pages in 110 books .

Exercise-6 (OMIT) Skills Section

MENTAL MATHS:

a) $350 \times 0 \times 350 =$ _____.

b) _____ $\times 435 \times 56 = 0$

c) A shop had 45 packets of chips arranged in 1 row. The shopkeeper had no chips packets left at the end of the day. He sold _____ packets during the day.

e) Product of the greatest and smallest 3-digit numbers = _____

DELHI PUBLIC SCHOOL, GANDHINAGAR

CLASS : 4

SUBJECT: MATHS

Academic Session 2021-22

CHAPTER- 2

Addition and Subtraction

RECAPITULATION

1. If $4562+1324 =5886$, what is $5886 - 4562$?
2. What is $5025 - 5025 =$
3. The number 1000 less than 10,000 is _____.
4. What is $4999+1=_$
5. What is $1256 +0 =$

Addition is ...

... bringing two or more numbers (or things) together to make a new total.

The numbers to be added together are called the "**Addends**":

Addition:

$$8 + 3 = 11$$

Addend Addend Sum or Total

Chapter-2

Addition and subtraction (Notebook)

Addition- Bringing two or more numbers together.

$$\begin{array}{r} 8 \quad \text{Addend} \\ +5 \quad \text{Addend} \\ \hline 13 \quad \text{Sum} \end{array}$$

The number to be added are called addends.

The answer of addition is called sum.

Exercise-1(Notebook)

Q.1 Add

a)

		1	1	1	
		4	6	8	3
+		6	3	9	7
	1	1	0	8	0

c)

		1	1	1	
		7	7	7	7
+		3	3	3	3
	1	1	1	1	0

Activate Windows
Go to Settings to activate Windows.

Q.2 Add

b) 7081+5539

			1	1	
		7	0	8	1
+		5	5	3	9
	1	2	6	2	0

c) 4038+9999

		1	1	1	
		4	0	3	8
+		9	9	9	9
	1	4	0	3	7

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Q.3 Magan's parents bought a refrigerator for ₹ 6578 and a television for ₹ 4309. How much money did they spend?

Solution:

Cost of Refrigerator = ₹ 6578

Cost of Television = ₹ 4309

Total Money spent=

			1	
	6	5	7	8
+	4	3	0	9
	1	0	8	7

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Addition of 5-digit numbers

Add in order :

Ones → tens → hundreds → thousands → ten thousands

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Exercise- 2 (Notebook)

Q.1 Add

a)

	1	1	1	1	
	2	4	3	1	4
+	3	7	8	8	6
	6	2	2	0	0

d)

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

Activate Windows
Go to Settings to activate Windows.



Q.2 Add

b) 44,229+ 2789

		1	1	1	
	4	4	2	2	9
+		2	7	8	9
	4	7	0	1	8

d) HW

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Q.3 Every month Parul's mother deposits some money in the bank. She deposited ₹ 12,980 in January and ₹ 15,880 in February. How much money did she deposit in the two months ?

Solution :

Money deposited in January= ₹ 12,980

Money deposited in February= ₹ 15,880

Total money deposited in 2months=

		1	1		
	1	2	9	8	0
+	1	5	8	8	0
	2	8	8	6	0

Ans: Parul's mother deposited ₹ 28,860 in 2 months.

Activate Windows
Go to Settings to activate Windows.



Q.4 In a village , there are 45356 men. The number of women is 2879 more than the number of men. How many women are there in the village?

Solution:

Number of men = 45,356

Number of women is 2879 more than the number of men=

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

Ans: There are 48,235 women in the village.

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Subtraction (Notebook)

Subtraction is taking one number away from another.

8 → Minuend

-5 → Subtrahend

3 → Difference

- **Minuend:** The number that is to be subtracted from.
- **Subtrahend:** The number that is to be subtracted.
- **Difference:** The result of subtracting one number from another.

The answer of subtraction is called difference.

Activate Windows
Go to Settings to activate Windows.



Subtraction of 5-digit numbers

Subtract in order :

Ones → tens → hundreds → thousands → ten thousands

Activate Windows
Go to Settings to activate Windows.



Check

- $56843 - 27968 = 28875$
- Check:
- Difference + smaller number (Subtrahend) = greater number (Minuend)**

$28875 + 27968 = 56843$ Therefore,
the answer is correct.

	2	8	8	7	5
+	2	7	9	6	8
	5	6	8	4	3

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Go to Settings to activate Windows.



Exercise-3 (Notebook)

Q.1 Subtract . In each case , check the answer by addition.

a)

		7	12	17	
	5	8	3	7	2
-	2	6	5	8	2
	3	1	7	9	0

Check

		1	1		
	3	1	7	9	0
+	2	6	5	8	2
	5	8	3	7	2

Activate Windows
Go to Settings to activate Windows.

d)

	5	9	9	9	10
	6	0	0	0	0
-	2	7	5	3	5
	3	2	4	6	5

Check

	1	1	1	1	
	3	2	4	6	5
+	2	7	5	3	5
	6	0	0	0	0

Activate Windows
Go to Settings to activate Windows.



Q.2

b) Subtract 12,345 from 50,000.

	4	9	9	9	10
	5	0	0	0	0
-	1	2	3	4	5
	3	7	6	5	5

d) Find the difference between 35,287 and 47,363.(self-practice)

Word Problems

Q.4.

50,000 copies of a book have to be printed and bound. In a week 25,540 books were completed. How many are left?

Solution:

Number of books to be printed and bound= 50,000

Number of books completed = 25,540

Number of books left to be printed and bound=

	4	9	9	10	
	5	0	0	0	0
-	2	5	5	4	0
	2	4	4	6	0

Q. 5

The population of Karimganj is 23,678. The population of Azamgarh is 46,567. Which town has a larger population? How much more?

Solution:

Population of Azamgarh = 46,567

Population of Karimganj = 23,678

		5	14	15	17
	4	6	5	6	7
-	2	3	6	7	8
	2	2	8	8	9

Ans. Azamgarh has a larger population by 22,889

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Exercise- 4 (Notebook)

a) $7763 + 4594 - 306$

Step-1

	1	1		
	7	7	6	3
+	4	5	9	4
	1	2	3	5
				7

Step-2

1	2	3	5	7
-	0	3	0	6
	2	0	5	1

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c) $9896 - 2723 + 6516$

d) $2335 + 1545 - 3666$ (HW)

Step 1 -

	1	1	1	
	9	8	9	6
+	6	5	1	6
	1	6	4	1
				2

Step 2 -

	5	13	10	12
1	6	4	1	2
-	2	7	2	3
	1	3	6	8
				9

Activate Windows
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Q.2 On Saturday evening, 5450 people visited India Gate . Out of these 1265 were men, 1150 were women and the rest were children. How many children visited India Gate ?

Men =1265 Women=1150 Children=?

Solution:

Number of men= 1265

Number of women= 1150

Number of men and women both

	1	2	6	5
+	1	1	5	0
	2	4	1	5

Total number of people=

Number of men and women=

Number of children=

			4	10
	5	4	5	0
-	2	4	1	5
	3	0	3	5

Activate Windows
Go to Settings to activate Windows.



Mental Math

Work out the following mentally.

a) $1617+19$

- $1617+20$

- $1637-1$

- 1636

b) $1238+27$

$1238+30$

$1268-3$

1265

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g) $2639-28$

- $2639-30$

- $2609+2$

- 2611

h) $4166-39$

$4166-40$

$4126+1$

4127

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SUBJECT ENRICHMENT ACTIVITY

NUMBER BUILDING SKILLS

CLASS IV

LAB ACTIVITY - 1

Number Building Skills

OBJECTIVE : At the end of this activity, the students will be able to develop the concept of forming five and six digit greatest and smallest numbers along with expanded form.

REQUIRED MATERIAL :

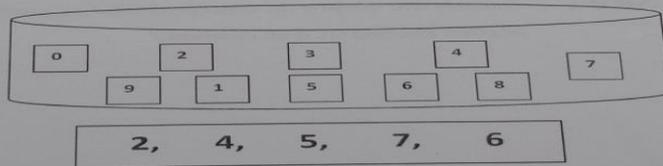
- Σ Ten flash cards (0 to 9)
- Σ One bowl
- Σ Pencil colours, pencil and ruler.

PRE- REQUISITE KNOWLEDGE :

- Σ Place Value
- Σ Forming 4 digit numbers.

PROCEDURE :

1. Student will pick up 5 flash cards and will write the digits in the box.



2. They will arrange the flash cards to make the greatest and smallest five-digit number.*

A. GREATEST FIVE DIGIT NUMBER

TTH	TH	H	T	O
7	6	5	4	2

B. SMALLEST FIVE DIGIT NUMBER

TTH	TH	H	T	O
2	4	5	6	7



3. In this manner, they will again take out 6 flash cards and arrange them to make the greatest and smallest six-digit numbers.

1, 6, 0, 5, 7, 9

A. LARGEST SIX DIGIT NUMBER

L	T	TH	H	T	O
9	7	6	5	1	0

B. SMALLEST SIX DIGIT NUMBER

L	T	TH	H	T	O
1	0	5	6	7	9

OBSERVATION: 1. Students will observe while building the greatest and smallest numbers that the digits were arranged in ascending and descending order.

2. While building the smallest number zero always come in second place.

CONCLUSION: Students will develop the concept of building greatest and smallest five and six digit numbers.

—, —, —, —, —,

- Smallest 5 –digit number:
- Expanded form:
- Greatest 5 –digit number :
- Expanded form:

AIL

FIND THE PALINDROME OF THE GIVEN NUMBER

A) 567

B) 905

Rubrics:

1 mark for adding reverse number.

3 mark for correct number

1 mark for neatness

MULTIPLICATION OF GIVEN NUMBER

LAB ACTIVITY – 2

Multiplication Of Numbers

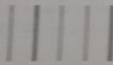
OBJECTIVE : To do multiplication of numbers using concrete objects.

REQUIRED MATERIAL : Straws, paper, pencil / pen, glue.

PRE- REQUISITE KNOWLEDGE : Multiplication of 1-digit number with 1-digit number

PROCEDURE :

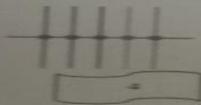
1. Make a rectangle of a convenient size on page 6.
2. To perform multiplication of a number 5 with a number, take 5 straws and paste them on page 6.



3. To multiply a number 5 and 1, put one straw horizontally on the 5 vertical straws on the page 6 as shown below.



4. Count the number of points of intersection as shown in Fig. 3, which is 5.
 $5 \times 1 = 5$



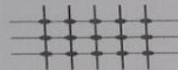
5. Now, place 2 straws horizontally on 5 vertical straws as in Fig. 4. Count the points of intersection. Number of points of intersection is 10.

Thus, $5 \times 2 = 10$



6. Similarly, place 3 straws horizontally on the 5 vertical straws and count the points of intersection, which is 15.

So, $5 \times 3 = 15$



In this way, find the product of 5 with any number.

OBSERVATION:

1. Number of vertical straws = _____
Number of horizontal straws = 1.
Number of points of intersection = _____ = _____ \times 1.
 2. The number of horizontal straws = 2
Number of points of intersection = _____ = _____ \times 2.
 3. Number of horizontal straws = 3
Number of points of intersection = _____ = _____
- | | | |
|-----------------------|-----------------------|-----------------------|
| $5 \times 1 =$ _____, | $5 \times 2 =$ _____, | $5 \times 3 =$ _____, |
| $5 \times 4 =$ _____, | $5 \times 5 =$ _____, | $5 \times 6 =$ _____, |
| $5 \times 7 =$ _____, | $5 \times 8 =$ _____, | $5 \times 9 =$ _____, |
| $5 \times 1 =$ _____, | | |

CONCLUSION:

This activity can be used in finding product of any two numbers.



Explanation

- Number of Vertical Straw-
- Number of Horizontal Straw-1
- Number of point of intersection-

DELHI PUBLIC SCHOOL, GANDHINAGAR

CLASS : 4

SUBJECT: MATHS

Academic Session 2021-22

CHAPTER- 1

LARGE NUMBERS

Recapitulation (Oral)

Q.1 Write the number name for the following.

a) 4,670

Q.2 Write the expanded form of:

a) 5674

Q.3 Write the place value of the underlined digit 1 6 4 9

Q.4 Use the given digits to make the greatest and smallest 4-digit number:

5, 1, 9, 0

Answers of recapitulation

Q.1 Write the number name for the following.

a) 4,670

Ans: Four thousand six hundred seventy

Q.2 Write the expanded form of:

a) 5674

Ans: $5000 + 600 + 70 + 4$

Q.3 Write the place value of the underlined digit 1 6 4 9

Ans: 40 or 4 tens

Q.4 Use the given digits to make the greatest and smallest 4-digit number:

5, 1, 9, 0

Ans: Greatest Number: 9,510

Smallest Number: 1,059

Concepts Section 5-DIGIT NUMBER(Explanation)

Greatest 4- digit number = 9999

Add 1 + 1

Smallest 5 digit number 10000

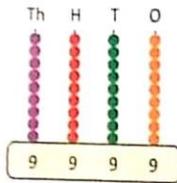
10000 is the smallest 5 digit number.

(It is read as Ten thousand)

9999 is the greatest 4 digit number.

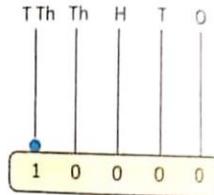
ABACUS

9999 is shown on the abacus as:



+ 1 =

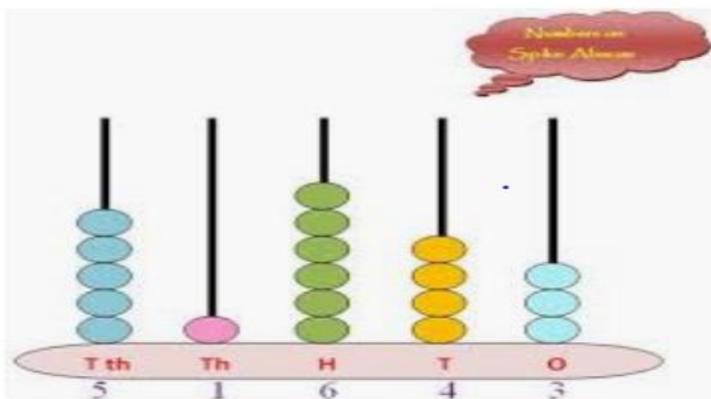
10000 is shown on the abacus as:



To show 10000, we need an abacus with five spikes. The spike to the left of the Thousands spike is the Ten Thousands (T Th) spike.



NUMBER ON ABACUS(Explanation)

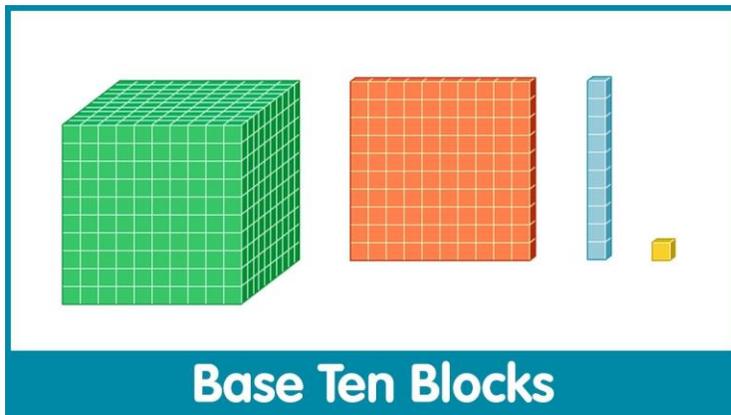


Place- value chart(Notebook)

Ten Thousands (T Th)	Thousands (Th)	Hundreds (H)	Tens (T)	Ones (O)
.	●●●	●●●●	●●●●	●●●●●●
1	3	5	4	8

Place value of 1 = 10 000
 Place value of 3 = 3 000
 Place value of 5 = 500 → 1 3 5 4 8
 Place value of 4 = 40
 Place value of 8 = 8

Number Name:Thirteen thousand five hundred forty eight.



10 ones = 1 tens
 10 tens = 1 hundreds
 10 hundreds = 1 thousands
 10 thousands = 100 hundreds

PLACE VALUE AND FACE VALUE CHART (NOTEBOOK)

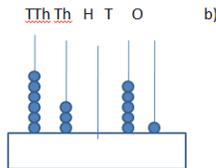
NUMBERS	PLACE VALUE	FACE VALUE
67,890	800	8
39,835	30	3
10,489	0000	0

EXERCISE-1(Text book)

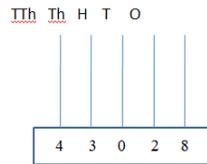
EXERCISE-1

EXERCISE-1 Check your answers

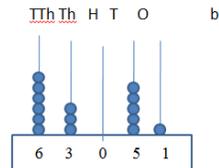
Q-1 Write the number on each)



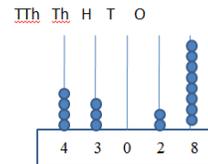
Q-2 Show the number on the abacus



Q-1 Write the number on each)



Q-2 Show the number on the abacus



Q-3. Write the number for the number name.(Notebook)

Ninety-one thousand four hundred seventy four

TTH	TH	H	T	O
9	1,	4	7	4

Eleven thousand ninety one

TTH	TH	H	T	O
1	1	0	9	1

Exercise -1(Notebook)

Q-4. Read the number. Write the number name and expanded form.

a. 84,290

Number name- **Eighty-four thousand two hundred ninety.**

Expanded form- $80000+4000+200+90+0$

b. 60,032- (self practice)

Q-5 Write the Following

a. Smallest five digit number = **10,000**

b. 3 thousand more than 10,010 = **13,010**

c. 6 thousand less than 43,102 = **37,102**

Concepts Section 6-DIGIT NUMBER (Explanation)

- Greatest 5- digit number = 99999

$$\begin{array}{r} \text{Add 1} \quad \quad + \quad \quad 1 \\ \hline \end{array}$$

- Smallest 6-digit number 100000

- 100000 is the smallest 6-digit number.
- (It is read as 1 lakh)

99999 is the greatest 5-digit number.

PLACE VALUE CHART OF 6 DIGIT NUMBER (Explanation)

Number name = Three lakh eighty two thousand nine hundred sixty five

Lakhs period	Thousands Period		Ones Period		
Lakhs	Ten thousands	Thousands	Hundreds	Tens	Ones
1	0	0	0	0	0
3	8	2	9	6	5

Expanded form = 3,00,000 + 80,000 + 2,000 + 900 + 60 + 5

L Th ones
6,78,904

6,78,904 is read as Six lakh, seventy eight thousand, nine hundred four

Expanded form-6,00,000 + 70,000 + 8,000 + 900 + 0 + 4

Place value- 6 is 6 lakh or 6,00,000

7 is 7 ten thousand or 70000

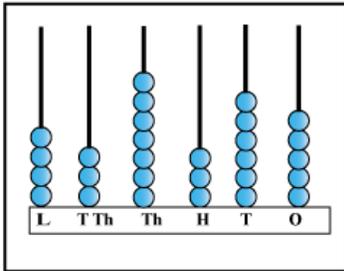
8 is 8 thousand or 8000

9 is 9 hundred or 900

0 is $0 \times 10 = 0$

4 is 4

Number on abacus



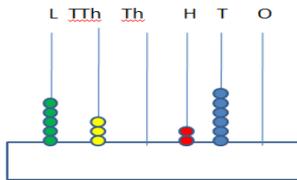
Number- 4,37,365

Number name – Four lakh thirty seven thousand three hundred sixty five

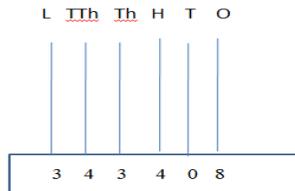
Exercise 2: Q 1 and Q 2 in the text book

EXERCISE 2

Q-1. Write the number on each abacus.

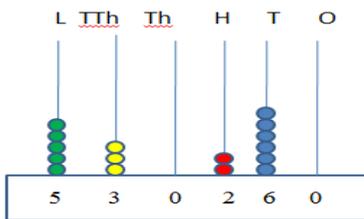


Q-2. Show the number on the abacus

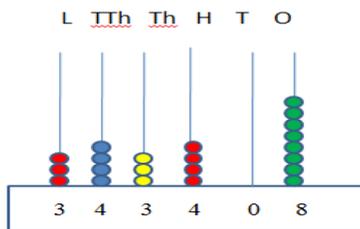


EXERCISE 2 Check your answer

Q-1. Write the number on each abacus.



Q-2. Show the number on the abacus



Exercise-2(Notebook)

Q-3. Write the number for the number name. Put the comma at the right place.

a. Two lakh ninety thousand one hundred one-

L	T Th	Th	H	T	O
2,	9	0,	1	0	1

b. Four lakh eleven-

L	T Th	Th	H	T	O
4,	0	0,	0	1	1

Q.4 Read the number and write the number name.

- a. 5,80,210- five lakh eighty thousand two hundred ten.
- b. 4,41,063- (self-practice)

Q-5 Write the numbers

- a. 3 lakh more than 4,10,010 = 7,10,010
- b. 6 ten thousand less than 5,63,102=5,03,102

COMPARING NUMBERS (Explanation)

A) Comparing numbers with different number of digits

The number with more digits is always greater

e.g 1,45,948 > 75,430

(six digit number) (five digit number)

B) Comparing numbers with same number of digits

1. First compare the lakhs digits.

5,39,468 > 4,28,972

As $5 > 4$

Therefore $5,39,468 > 4,28,972$

2. If the lakhs digits are the same, compare the ten thousands digit

$7,67,329 < 7,89,900$

As 6 is less than 8.

Therefore, $7,67,329 < 7,89,900$

3. Continue in this way going to the right digit by digit until you find two digits that are different.

EXERCISE 3 (Notebook)

Q-1. Fill in the correct symbol $<$ or $>$.

a. $64,332$ $86,331$

b. $1,95,422$ $95,099$

Q-2. Ring the greatest number in each.

a. $20,182$; $9,876$; $1,20,001$

b. $4,67,143$; $4,68,122$; $4,68,222$

Q-3. Ring the smallest number in each.

a. 4355 ; $44,355$; 4495

b. $67,789$; $67,879$; $67,979$

EXERCISE 3 (Check your Answer)

Q-1. Fill in the correct symbol $<$ or $>$.

a. $64,332$ $86,331$

b. $1,95,422$ $95,099$

Q-2. Ring the greatest number in each.

a. $20,182$; $9,876$; **$1,20,001$**

b. $4,67,143$; $4,68,122$; **$4,68,222$**

Q-3. Ring the smallest number in each.

a. **4355** ; 44,355 ; 4495

b. **67,789** ; 67,879 ; 67,979

ASCENDING AND DESCENDING ORDER (Explanation)

(A) Ascending order:

Arrange the numbers smaller to bigger.

Eg: 23,645 ; 34,456 ; 3456

3456 ; 23,645 ; 34,456

(B) Descending order:

Arrange the numbers bigger to smaller.

Eg: 23,645 ; 34,456 ; 3456

34,456 ; 23,645 ; 3456

EXERCISE -3 (Notebook)

Q-4 Arrange in ascending order:

a) 47,520 9760 52,497 1,00,000

Q-5 Arrange in descending order:

a) 50,329 59,530 59,329 5,59,530

Exercise-3 Check your answer

Q4- Arrange in ascending order:

a) 47,520 9760 52,497 1,00,000

Ans: **9760 47,520 52,497 1,00,000**

Q-5- Arrange in descending order:

a) 50,329 59,530 59,329 5,59,530

Ans: **5,59,530 59,530 59,329 50,329**

Building smallest and greatest numbers (Explanation)

WITHOUT REPEATING DIGITS.

- Arrange the digits in ascending order to build the smallest number.
- Arrange the digits in descending order to build the greatest number.
- We cannot write 0 in the beginning while building number as it does not have value.

EXERCISE-4 (Text book)

1. Build the greatest and smallest numbers with these digits, without repeating the digit.

SR NO.	DIGITS	NO OF DIGITS	GREATEST NUMBER	SMALLEST NUMBER
1.	5,3,2,1,4	5		
2.	0,2,7,5,6,9	6		

EXERCISE-4 (Check your answer)

1. Build the greatest and smallest numbers with these digits, without repeating the digit.

SR NO.	DIGITS	NO OF DIGITS	GREATEST NUMBER	SMALLEST NUMBER
1.	5,3,2,1,4	5	54,321	12,345
2.	0,2,7,5,6,9	6	9,76,520	2,05,679

ROUNDING NUMBERS (Explanation)

ROUND TO THE NEAREST 10.

If the ones digit is 5 or more it is rounded up.

Eg: (a) 36

Here ones digit(6) is more than 5 so rounded up

Ans 36 is rounded up to 40.

(b) 32 =32 is rounded down to 30

Here ones digit(2) is less than 5 so rounded down

Ans 32 is rounded down to 30

. ROUNDING NUMBERS(Explanation)

ROUND TO THE NEAREST 100.

If the Tens digit is 5 or more it is rounded up.

Eg: (a) 375 (300 and 400)

Here tens digit 7 is more than 5 so rounded up

Ans 375 is rounded up to 400.

(b) 227 (200 and 300)

Here tens digit 2 is less than 5 so rounded down

Ans 227 is rounded down to 200

ROUNDING NUMBERS (Explanation)

ROUND TO THE NEAREST 1000.

If the hundreds digit is 5 or more it is rounded up.

Eg: (a) 5987

Here hundreds digit 9 is more than 5 so rounded up

Ans 5987 is rounded up to 6000.

(b) 1325

Here hundreds digit 3 is less than 5 so rounded down

Ans 1325 is rounded down to 1000

EXERCISE-5 (Notebook)

Q-1 Round to the nearest 10

- a) 67
- b) 2456
- c) 23,450

Q-2 Round to the nearest 100

- a) 754
- b) 9772
- c) 99

Q-3 Round to the nearest 1000.

- a) 67,101
- b) 499
- c) 2,69,859

EXERCISE-5 Check your answers

Q-1 Round to the nearest 10

- a) 67

Ans: $7 > 5$, so 67 is rounded up to 70

- b) 2456

Ans: $6 > 5$, so 2456 is rounded up to 2460

- c) 23,450

Ans: $0 < 5$, so 23,450 is rounded to 23,450

Q-2 Round to the nearest 100

a) 754

Ans: $5=5$, so 754 is rounded up to 800

b) 9772

Ans: $7 > 5$, so 9772 is rounded up to 9800

c) 99

Ans: $9 > 5$, so it is rounded up to 100

Q-3 Round to the nearest 1000.

a) 67,101

Ans: $1 < 5$, so 67,010 is rounded down to 67,000

b) 0499

Ans: $4 < 5$, so 499 is rounded down to 000

c) 2,69,859

Ans: $8 > 5$, so 2,69,859 is rounded up to 2,70,000

ROMAN NUMERALS (Explanation)

- There are 7 basic symbols in Roman Numerals.

There is no symbol of 0 in the Roman Numerals

ROMAN NUMERALS	HINDU ARABIC
I	1
V	5
X	10
L	50
C	100

D	500
M	1000

- Rule 1: The roman digits I and X are repeated upto three times in succession to form the numbers.

- $I = 1$

- $II = 1 + 1 = 2$

- $III = 1 + 1 + 1 = 3$

- $X = 10$

- $XX = 10 + 10 = 20$

- $XXX = 10 + 10 + 10 = 30$

- Rule 2: When a digit of lower value is written to the right or after a digit of higher value, the values of all the digits are added. As:

$$VI = 5 + 1 = 6$$

$$XI = 10 + 1 = 11$$

$$XII = 10 + 2 = 12$$

$$XV = 10 + 5 = 15$$

- Rule 3: When a digit of lower value is written to the left or before a digit of higher value, then the value of the lower digit is subtracted from the value of the digit of higher value. As:

$$IV = 5 - 1 = 4$$

$$IX = 10 - 1 = 9$$

$$X + IX = 10 + (10 - 1) = 19$$

However, V is never written to the left of X

EXERCISE-6 (Text book)

Q-3. Use the Roman system rules to complete the table

Hindu Arabic	Roman Numbers	Hindu Arabic	Roman Numbers	Hindu Arabic	Roman Numbers
1	I	11	$10+1=XI$	21	XXI
2	II	12	$10+2=XII$	22	
3	III	13	$10+3=XIII$	23	
4	$(5-1)=IV$	14	$10+4=XIV$	24	
5	V	15	$10+5=XV$	25	XXV
6	$5+1=VI$	16		26	
7	$5+2=VII$	17		27	
8	$5+3=VIII$	18		28	
9	$10-1=IX$	19	XIX	29	
10	X	20		30	XXX

EXERCISE-6 (Notebook)

Q-1 Write the Roman Numerals:

a) $36 =$

b) $27 =$

Q-2 Write the Hindu –Arabic numerals:

a) $XXVIII =$

b) $XXX =$

EXERCISE-6 Check your answer

Q-1 Write the Roman Numerals:

a) 36

Ans : $10+10+10+5+1 = XXXVI$

b) 27

Ans: $10+10+5+1+1 = XXVII$

Q-2 Write the Hindu –Arabic numerals:

a) $XXVIII = 10+10++5+3=28$

b) $XXX = 10+10+10= 30$

Mental Maths

1. In which of these digits, does the digit 7 have a place value of 70000?

754896 474566 47566 78932

2. What is the sum of the place values of the digit 5 in 5,07,895?

Ans: 5,00,005

TEST OF CH-1: Ex. 1,2 &3 (10 marks)(Notebook)

Q.1. Arrange in ascending order: (2 marks)

21,906 3,008 22,497 1,00,008

Q.2. Fill in the correct symbol < or >.(2 marks)

(a) 1,95,422 95,099

(b) 48,901 48,909

Q.3. Arrange in descending order: (2 marks)

60,800 60,801 7,59,329 7,59,530

Q.4. Read the number and write the number name. (2 marks)

(a) 8,90,356 (b) 67,215

Q.5. Write the number for the number name. Put the comma at the right place. (2 marks)

(a) Five lakh sixty-five thousand eleven

(b) Seven lakh ninety thousand eight hundred twenty two

TEST OF CH-1: Ex. 1,2 &3 (10 marks)

ANSWERS

Q.1. Arrange in ascending order: (2 marks)

21,906 3,008 22,497 1,00,008

Ans: 3,008 21,906 22,497 1,00,008

Q.2. Fill in the correct symbol < or >.(2 marks)

(a) 1,95,422 95,099

(b) 48,901 48,909

Q.3. Arrange in descending order: (2 marks)

60,800 60,801 7,59,329 7,59,530

Ans: 7,59,530 7,59,329 60,801 60,800

Q.4. Read the number and write the number name. (2 marks)

(a) 8,90,356

Ans: Eight lakh ninety thousand three hundred fifty six

Q.4 (b) 67,215

Ans: Sixty seven thousand two hundred fifteen

Q.5. Write the number for the number name. Put the comma at the right place. (2 marks)

(a) Five lakh sixty-five thousand eleven 5,65,011

(b) Seven lakh ninety thousand eight hundred twenty two 7,90,822

CHAPTER-2

ADDITION AND SUBTRACTION

RECAPITULATION

1. If $4562+1324 =5886$, what is $5886 - 4562$? 2. What is $5025 - 5025 =$
3. The number 1000 less than 10,000 is _____.
4. What is $4999+1=_$
5. What is $1256 +0 =$

Addition is ...

... bringing two or more numbers (or things) together to make a new total.

The numbers to be added together are called the "**Addends**":

Addition:

$$8 + 3 = 11$$

Diagram illustrating the addition equation $8 + 3 = 11$. The number 8 is labeled "Addend" with a blue arrow pointing to it. The number 3 is labeled "Addend" with a red arrow pointing to it. The number 11 is labeled "Sum or Total" with an orange arrow pointing to it.

Words used for

- Addition- Add, Sum, Plus, Increase, Total

Chapter-2

Addition and subtraction (Notebook)

Addition- Bringing two or more numbers together.

8 Addend

+5 Addend

13 Sum

The number to be added are called addends.

The answer of addition is called sum.

Exercise-1(Notebook)

Q.1 Add

a)

		1	1	1	
		4	6	8	3
+		6	3	9	7
	1	1	0	8	0

c)

		1	1	1	
		7	7	7	7
+		3	3	3	3
	1	1	1	1	0

Q.2 Add

b) $7081 + 5539$

			1	1	
		7	0	8	1
+		5	5	3	9
	1	2	6	2	0

c) $4038 + 9999$

		1	1	1	
		4	0	3	8
+		9	9	9	9
	1	4	0	3	7

Q.3 Magan's parents bought a refrigerator for ₹ 6578 and a television for ₹ 4309. How much money did they spend?

Solution:

Cost of Refrigerator = ₹ 6578

Cost of Television = ₹ 4309

Total Money spent =

			1	
	6	5	7	8
+	4	3	0	9
	1	0	8	8
				7