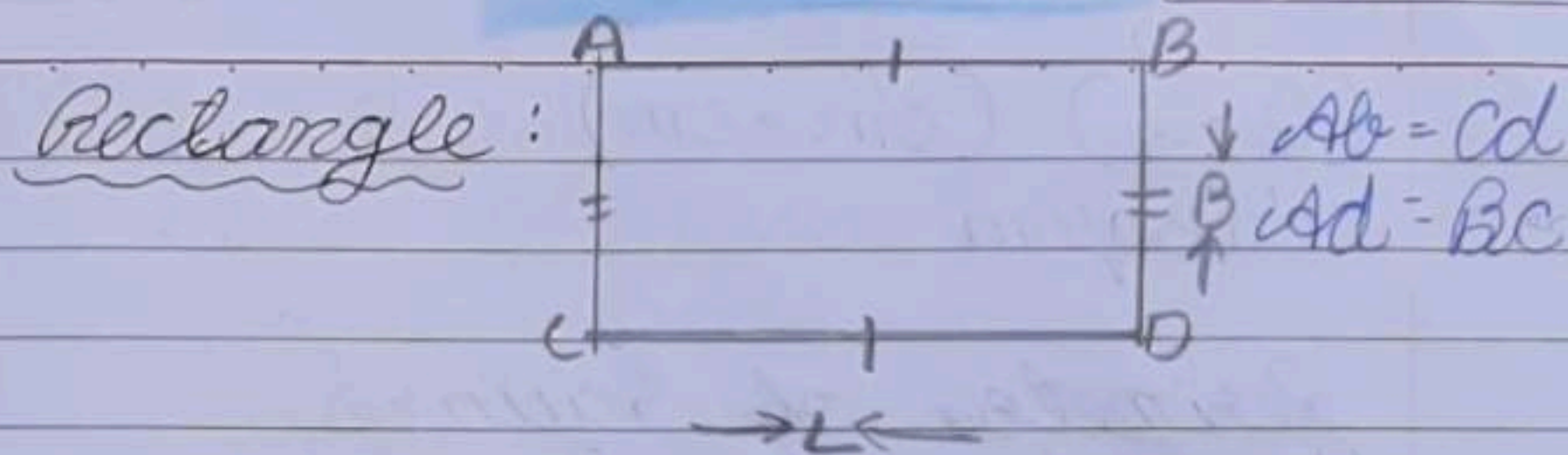
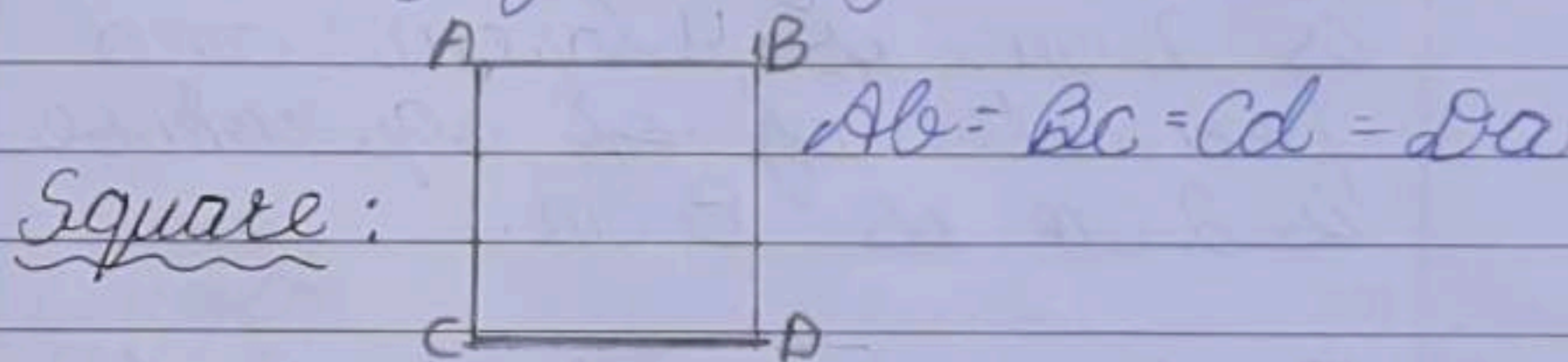


① Area and its boundary



Area of Rectangle: Length \times Breadth
 $= L \times B$

Perimeter of Rectangle: $2[L+B]$



Area of Square: Side \times Side
 $= S \times S$

Perimeter of Square: $4 \times$ Side

(Answer these questions)

Ques 1) If side of a square is 2 cm then what will be the area and perimeter?

Sol: Area of Square:
 $=$ Side \times Side
 $= 2 \times 2$

$$= (2 \times 2) \text{ (cm} \times \text{cm)}$$

$$= 4 \text{ sq/cm}$$

Perimeter of square

$$= 4 \times \text{Side}$$

$$= 4 \times 2$$

$$= 8 \text{ cm}$$

\therefore The area of sq. whose side is 2 cm is 4 sq. cm and the perimeter of sq. whose side is 2 cm is 8 cm.

Ques 2) Find area and perimeter of square:

i Side = 5 cm

Sol: ~~Area~~ Area of square

$$= \text{Side} \times \text{Side}$$

$$= 5 \times 5$$

$$= (5 \times 5) \text{ (cm} \times \text{cm)}$$

$$= 25 \text{ sq/cm}$$

Perimeter of square

$$= 4 \times \text{Side}$$

$$= 4 \times 5$$

$$= 20 \text{ cm}$$

ii Side = 9 cm

Area of square

$$= \text{Side} \times \text{Side}$$

$$= 9 \times 9$$

$$= (9 \times 9) \text{ (cm} \times \text{cm)}$$

$$= 81 \text{ sq. cm}$$

Perimeter of square

$$= 4 \times \text{Side}$$

$$= 4 \times 9$$

$$= 36 \text{ cm}$$

Ques 3) Length = 3 cm, Breadth = 2 cm. Find area and Perimeter?

Sol: Area of rectangle

$$= L \times B$$

$$= 3 \text{ cm} \times 2 \text{ cm}$$

$$= 6 \text{ cm}$$

Perimeter of rectangle

$$= 2 [L + B]$$

$$= 2 [3 + 2]$$

$$= 2 [5]$$

$$= 5 \times 2$$

$$= 10 \text{ cm}$$

perimeter

Ques 4) Find area and perimeter of rectangle of (2x3)

i $L = 5 \text{ cm}$ and $B = 3 \text{ cm}$

ii $L = 9 \text{ cm}$ and $B = 7 \text{ cm}$

Sol i Area of rectangle

= $L \times B$

= 5×3

= 15 sq/cm

Perimeter of rectangle

= $2[L+B]$

= $2[5+3]$

= $2[8]$

= 2×8

= 16 cm

Sol ii Area of rectangle

= $L \times B$

= 9×7

= 63 sq/cm

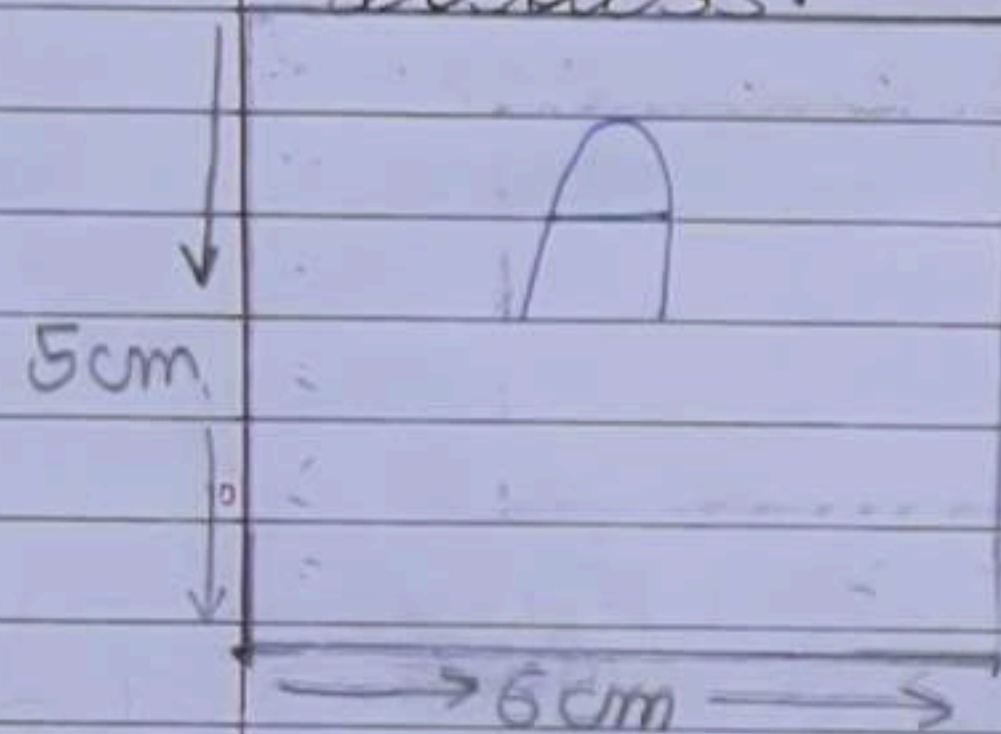
Perimeter of rectangle

= $2[L+B]$

= $2[9+7]$
 = $2[16]$
 = 16×2
 = 32 cm

TOPIC: Whose slice is bigger?

Ques 1) Suggest some way to find out whose piece bigger. Discuss.



Ans) Area of rectangle
 $= L \times B$
 $= 5 \times 5$
 $= (5 \times 5) \text{ (cm} \times \text{cm)}$
 $= 30 \text{ sq. cm}$

OR

Piece A

30 sq. cm

1	18	17	16	15	14
2	19	20	21	22	13
3	26	25	24	23	12
4	27	28	29	30	11
5	6	7	8	9	10

Ques 2) In the same way find the area of Piece B

1	6	7	16	13	16	19	22	25	28	31
2	5	8	11	14	17	20	23	26	29	32
3	4	9	12	15	18	21	24	27	30	33

OR

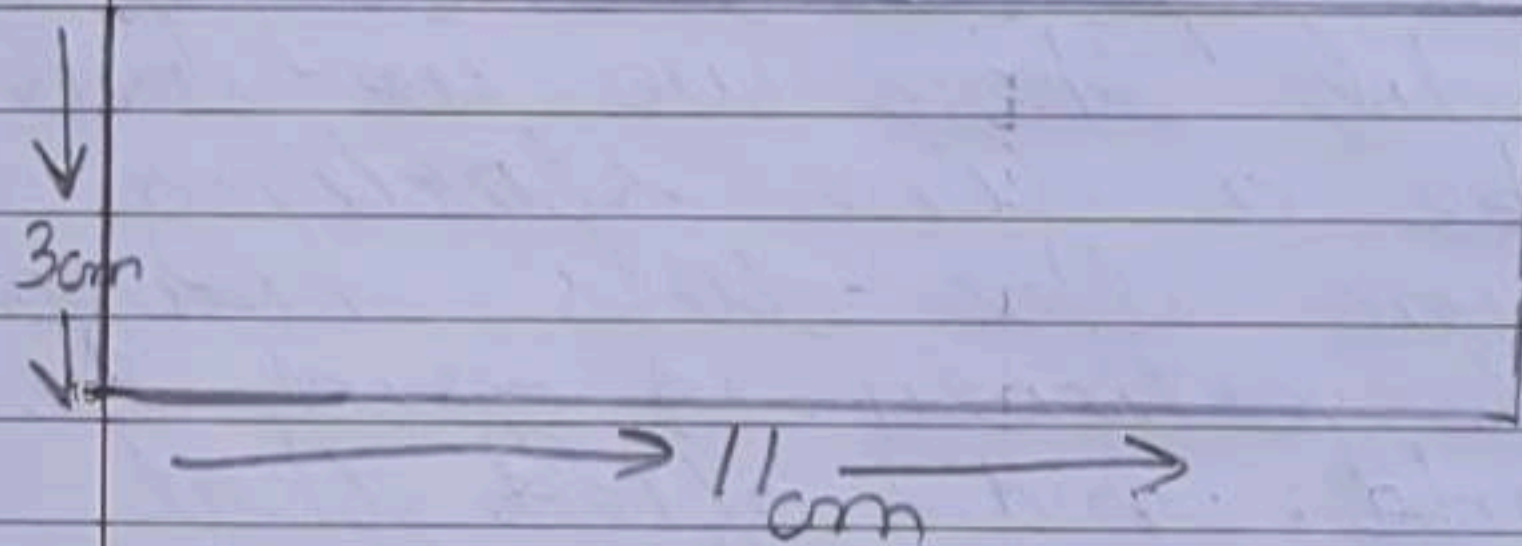
Area of Rectangle

$$= L \times B$$

$$= 11 \times 3$$

$$= (11 \times 3) \text{ (cm} \times \text{cm)}$$

$$= 33 \text{ sq. cm}$$



Ques 3) Who had the bigger piece? How much bigger?

Ans 15) Piece B is bigger

$$33 - 30 = 03 \text{ cm}^2$$

3 ~~times~~ bigger
 cm^2

TOPIC: Cover the stamps

This stamp has an area of 4 sq. cm. Guess how many such stamps will cover this big rectangle.

Sol First we will measure the length and the breadth of the rectangle. Then we will divide the length and the breadth into 4 equal parts and by putting a dot. Then we will make a line starting from the dots horizontally and vertically. A grid is made, and after that we will count the boxes that are made in the grid and that will be the answer.



Ans) The 24 squares will cover the big rectangle. (included the first stamp)

① Area and its boundary

TOPIC: Check your guess

a) Measure the yellow rectangle. It is 14 cm long.

b) How many stamps can be placed along its length?

7 stamps

Sol $\frac{14}{2}$

c) How ~~many~~ wide is the rectangle? 8 cm

d) How many stamps can be placed along its width?

4 stamps

Sol $\frac{8}{2}$

e) How many stamps are needed to cover the rectangle?

28 stamps

Sol Area of yellow rectangle : 112
area of stamp : 4

$$= 14 \times 8$$

$$= 112$$

$$= \frac{112}{4} = 4 \overline{)112}, (28$$

$$\frac{8}{32}$$

$$32$$

$$= 28 \text{ stamps}$$

f) What is the ^{area of the} rectangle?

$$112 \text{ sq. cm}$$

Sol Area of Rectangle

$$= L \times B$$

$$= 14 \times 8$$

$$= (14 \times 8) \text{ (cm} \times \text{cm)}$$

$$= 112 \text{ sq/cm}$$

g) What is the perimeter of the rectangle?

Sol Perimeter of Rectangle

$$= 2(L+B)$$

$$= 2(14+8)$$

$$= 2(22)$$

$$= 22 \times 2$$

$$= 44$$

$$= 44 \text{ cm}$$

Holiday's HOMEWORK.

rectangle is 4 cm then
what will be the length?

Sol

$$2(L+B) = 20$$

$$2(L+4) = 20$$

$$2L+B = 20$$

$$2L = 20 - B$$

$$= 18$$

$$\therefore L = 19$$

$$\therefore \begin{array}{r} 12 \ : \ 2 \overline{) 12 \ 16} \\ \underline{12} \\ 0 \end{array}$$

$$\begin{array}{r} 12 \ : \ 2 \overline{) 12 \ 16} \\ \underline{12} \\ 0 \end{array}$$

$$L = 6 \text{ cm}$$

Crosscheck

$$2(L+B)$$

$$2(6+4)$$

$$10$$

$$2 \times 10 = 20$$

	2	3	4	5	6	7	8	9
1	2	6	4	5	6	7	8	9
2	4	9	8	10	12	14	16	18
3	6	12	12	15	18	21	24	27
4	8	15	16	20	24	28	32	36
5	10	18	20	25	30	35	40	45
6	12	18	24	30	36	42	48	54
7	14	21	28	35	42	49	56	63
8	16	24	32	40	48	56	64	72
9	18	27	36	45	54	63	72	81
10	20	30	40	50	60	70	80	90
11	22	33	44	55	66	77	88	98

	10	11	12	13	14	15	16	17	18
1	10	11	12	13	14	15	16	17	18
2	20	22	24	26	28	30	32	34	36
3	30	33	36	39	42	45	48	51	54
4	40	44	48	52	56	60	64	68	72
5	50	55	60	65	70	75	80	85	90
6	60	66	72	78	84	90	96	102	108
7	70	77	84	91	98	105	112	119	126
8	80	88	96	104	112	120	128	136	144
9	90	99	108	117	126	135	144	153	162
10	100	110	120	130	140	150	160	170	180
11	110	121	132	143	154	165	176	187	198

	18	19	20	21	22	23	24	25
1	18	19	20	21	22	23	24	
2	36	38	40	42	44	46	48	
3	54	57	60	63	66	69	72	"
4	72	76	80	84	88	92	96	
5	90	95	100	105	110	115	120	
6	108	114	120	126	132	138	144	
7	126	133	140	147	154	161	168	
8	144	152	160	168	176	184	192	
9	162	171	180	189	198	207	216	
10	180	190	200	210	220	230	240	
11	198	209	220	231	242	253	264	

1	25
2	50
3	75
4	100
5	125
6	150
7	175
8	200
9	225
10	250
11	275

c) A thin wire 20 cm long formed into a rectangle. If the width of this rectangle is 4 cm what will be its length?

Sol) Perimeter of rectangle: $2(L+B)$
 $20 = 2 \times L + 2 \times B$
 $20 = 2 \times L + 2 \times 4 \text{ cm}$
 $20 = 2L + 8 \text{ cm}$
 $20 \text{ cm} - 8 \text{ cm} = 2L$
 $= 12 = 2L$
 $= \frac{12}{2}$
 $\therefore \text{Length} = 6 \text{ cm}$

Crosscheck:
 $2(L+B)$
 $2(6+4)$
 $2(10)$
 $10 \times 2 = 20 \text{ cm}$
 $\rightarrow 6 \text{ cm} \leftarrow$

d) A square carrom board has a perimeter of 320 cm. How much is its area?

Sol) We can't tell the area till we do not know 1 side of square. So first we will find the area: Perimeter of square:
 $= 320 \text{ cm} = 4 \times \text{Side}$
 $= \frac{320 \text{ cm}}{4} = \text{Side}$
 $\therefore \text{Side} = 80$

Area: Side \times Side
 $= 80 \times 80$
 $= (80 \times 80) \text{ (cm} \times \text{cm)}$
 $= 6400 \text{ sq/cm}$

Ans) $6400 \text{ sq/cm} = 64 \text{ meter}$

b) Sanya, Azushi, Momon and Kabir made greeting cards. Complete the table for these cards:

card	length	width	Perimeter	Area
Sanya	10 cm	8 cm	36 cm	80 sq cm
Momon	11 cm		44 cm	sq cm
Azushi		8 cm		80 sq cm
Kabir			40 cm	100 sq cm

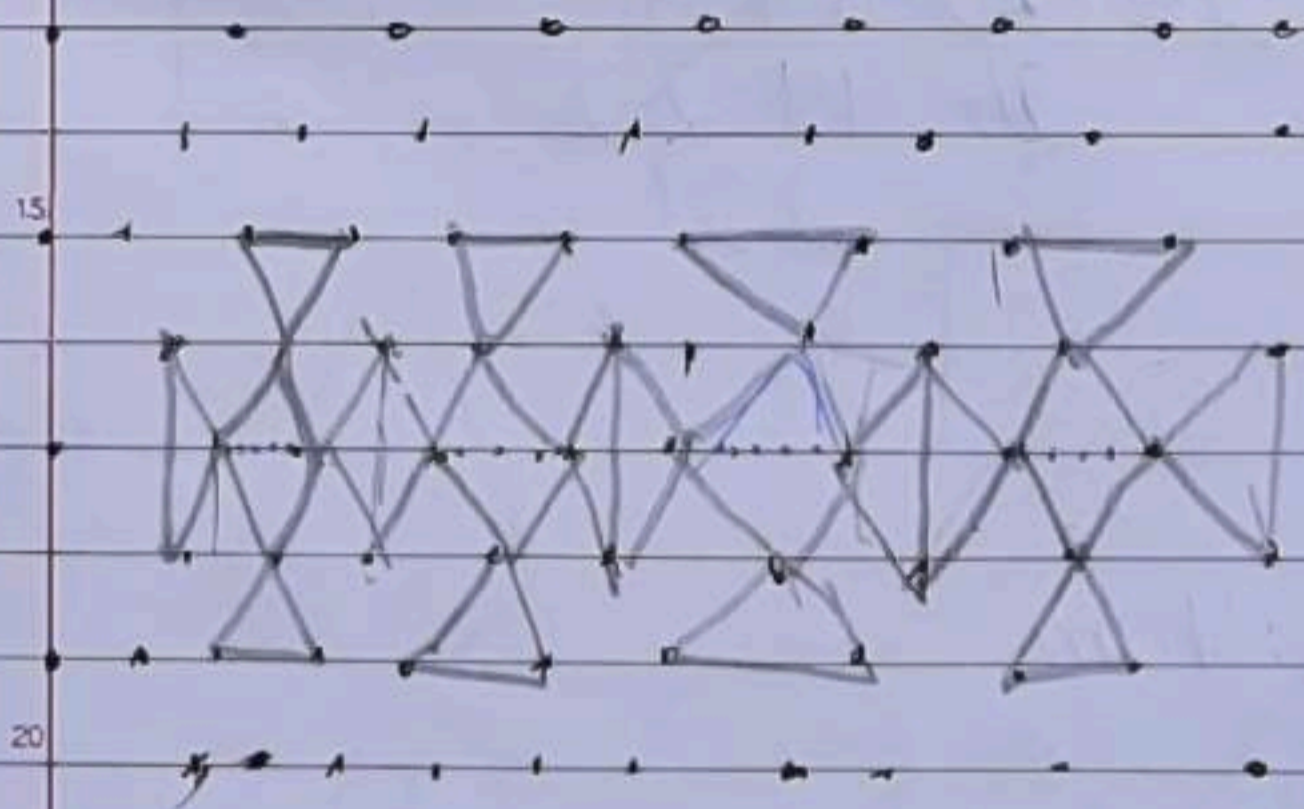
Sol) Sanya: Perimeter of rectangle
 $= 2(L+B)$
 $= 2(10+8)$
 $= 2(18)$
 $= 18 \times 2$
 $= 36$
 $= 36 \text{ cm}$

Area of rectangle
 $= L \times B$
 $= 10 \times 8$
 $= (10 \times 8) \text{ (cm} \times \text{cm)}$
 $= 80 \text{ sq/cm}$

HOME-WORK

e) How many tiles like the triangle given here will fit in the white design?

Area of design: 3 sq/cm



* Now make some of the your design of area 4 and 6 sq/cm

① Area and its boundary

f) Sanya, Arushi, Manav and Kalie made greeting cards. Complete the table for their greeting cards.

Whose card	Length	Width	Perimeter	Area
Sanya	10cm	8cm	36cm	80sq/cm
Manav	11cm	11cm	44cm	121sq/cm
Arushi				
Kalie				

Manav: $2(l+b)$ Peri
 $2(11+11) = 44$
 $2 \times 22 = 44$
 $26 = 44 - 22$
 $= 22$

\therefore Break: 11cm

Area of square
 $= s \times s$
 $= 11 \times 11$
 $= (11 \times 11) \text{ (cm} \times \text{cm)}$
 $= 121 \text{ sq/cm}$

WORK-SHEET

Name of 3D shape

Write the name of shape under the line given below the shape, and colour the shapes.

Cylinder, Cube, Cuboid, Prism
 Cone, Sphere, Pyramid

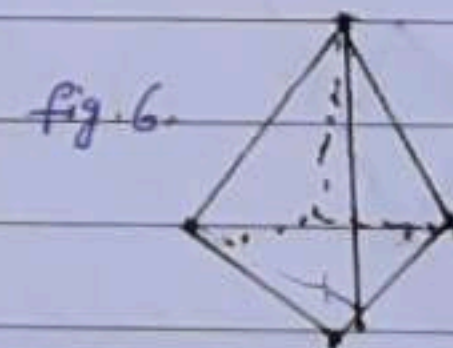
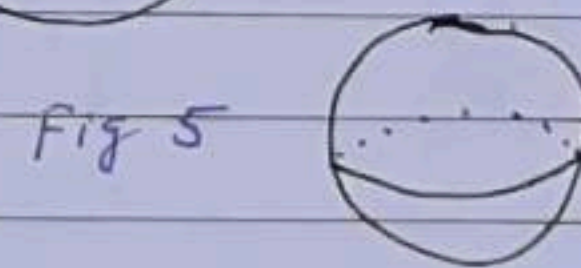
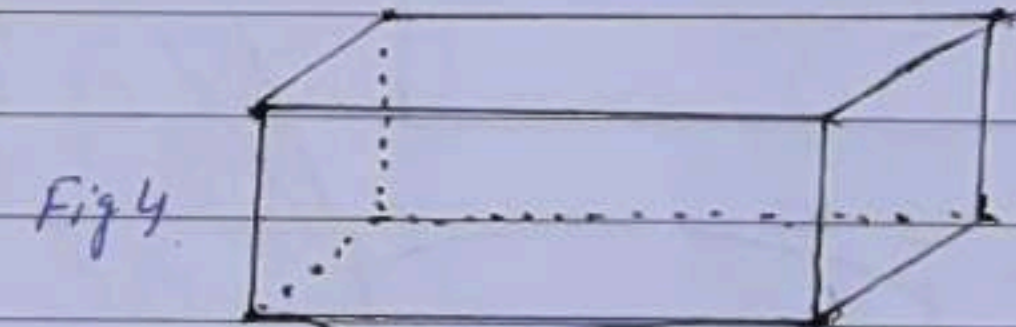
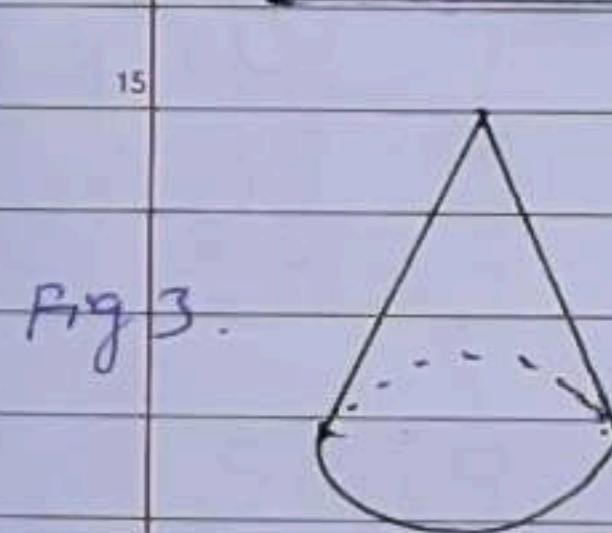
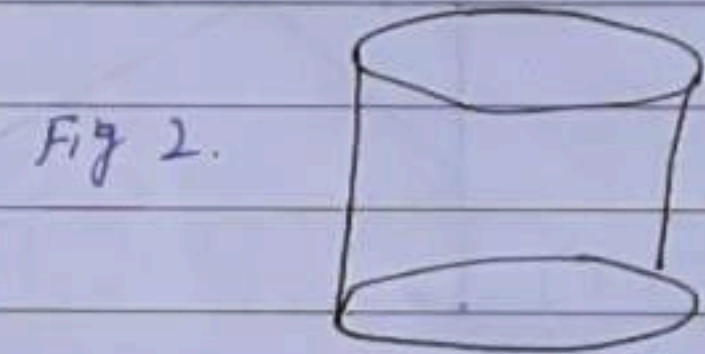
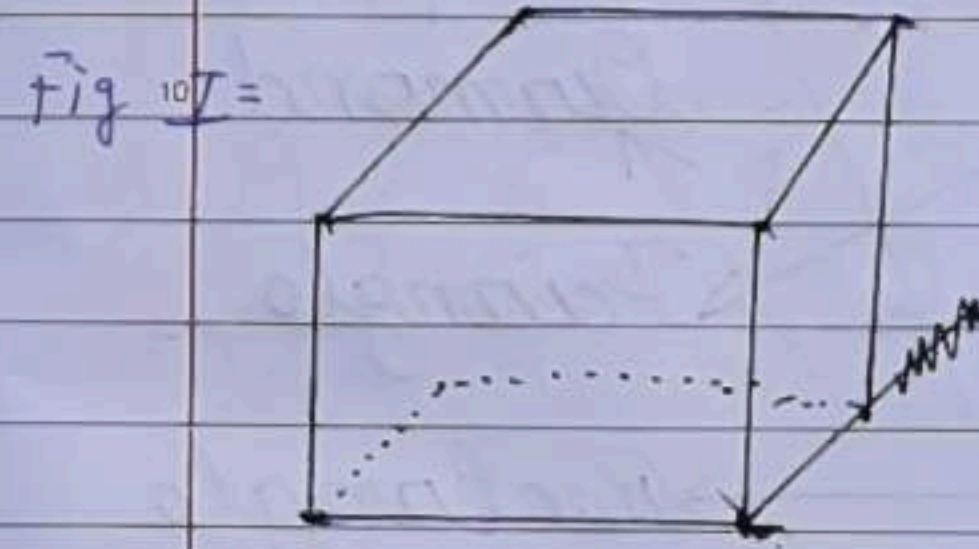
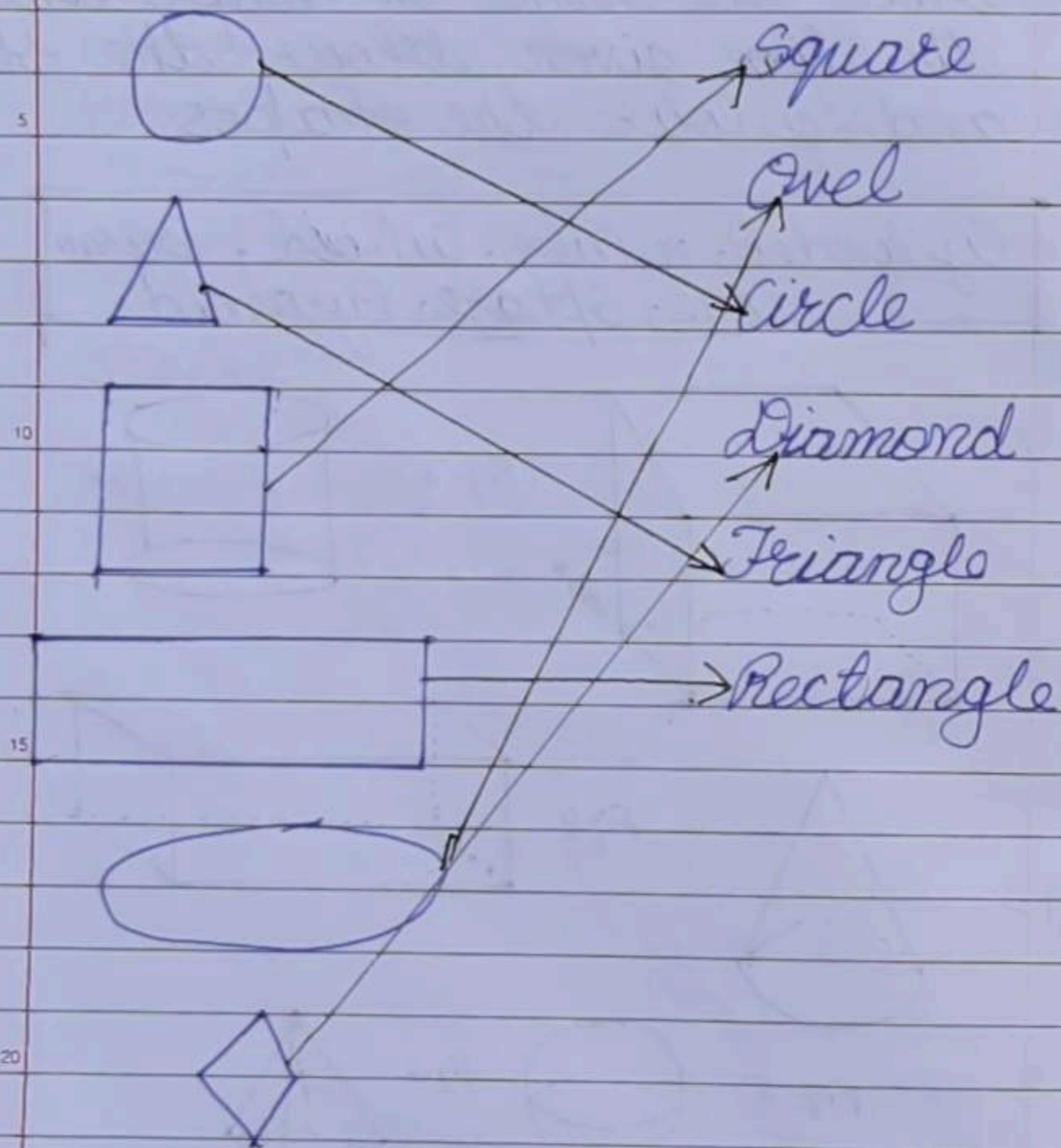


Fig 1: Cube Fig 3: Cone Fig 5: Sphere
 Fig 2: Cylinder Fig 4: Cuboid Fig 6: Pyramid

Matching shapes to names
(2D)



Decimal Addition

1.	$\begin{array}{r} 28.2 \\ + 93.5 \\ \hline 121.7 \end{array}$	87.	$\begin{array}{r} 382.6 \\ + 126.5 \\ \hline 509.1 \end{array}$	13	$\begin{array}{r} 462.8 \\ + 731.2 \\ \hline 1194.0 \end{array}$
2.	$\begin{array}{r} 94.6 \\ + 37.2 \\ \hline 131.8 \end{array}$	88.	$\begin{array}{r} 128.2 \\ + 340.0 \\ \hline 468.2 \end{array}$	14	$\begin{array}{r} 838.0 \\ + 542.7 \\ \hline 1380.7 \end{array}$
3.	$\begin{array}{r} 82.6 \\ + 23.6 \\ \hline 106.2 \end{array}$	9.	$\begin{array}{r} 385.6 \\ + 297.9 \\ \hline 683.5 \end{array}$	15	$\begin{array}{r} 363.0 \\ + 080.5 \\ \hline 443.5 \end{array}$
4.	$\begin{array}{r} 48.7 \\ + 39.8 \\ \hline 88.5 \end{array}$	10.	$\begin{array}{r} 670.7 \\ + 189.0 \\ \hline 859.7 \end{array}$	16	$\begin{array}{r} 68.4 \\ + 29.8 \\ \hline 98.2 \end{array}$
5.	$\begin{array}{r} 50.9 \\ + 39.4 \\ \hline 90.3 \end{array}$	11.	$\begin{array}{r} 139.7 \\ + 382.6 \\ \hline 522.3 \end{array}$	17.	$\begin{array}{r} 80.2 \\ + 52.8 \\ + 13.0 \\ \hline 146.0 \end{array}$
6.	$\begin{array}{r} 72.8 \\ + 37.4 \\ \hline 110.2 \end{array}$	12.	$\begin{array}{r} 738.2 \\ + 582.5 \\ \hline 1320.7 \end{array}$	18.	$\begin{array}{r} 25.3 \\ + 38.8 \\ + 64.3 \\ \hline 128.4 \end{array}$

WORK-SHEET

REM: $0 \leq \text{number} \leq 10$
(number falls between 0 and 10 only)

Place value for decimals.

Ques 1) Write the value of five in 7.53 in standard form and word form.

Ans) 0.5 5 tenths

Ques 2) What happens to the value of 2.48 if you change the 8 to a 1?

Ans) The value of the number decreases by 0.07.

Explanation:

$$2.48$$

= (8 changed to 1)

new # 2.41

subtracting 2.48

$$\begin{array}{r} 2.48 \\ - 2.41 \\ \hline \end{array}$$

$$= 0.07$$

So, the value decreased by 0.07.

Ques 3) Write the value of the 9 in these numbers in standard form and written form.

2.9: Standard form: 2.9×10^0

Two and Nine Tenths

2) 0.19

Neg

Standard form

0.19 (since the number starts from decimal it is less than one.)

1.9×10^{-1}

word form: Nineteen Hundredths

3) 975.04

standard form

975.04

How many steps = 2

~~975~~ 9.7504×10^2

word form: nine hundred seventy five and four hundredths.

9) 9.12

Standard form: 9.12×10^0

9.12

The decimal is already at its place. we have to multiply with 10^0

word form:

$10^0 = 1$
The number is unaffected

nine and twelve hundredths

4) 0.89

Standard form

8.9×10^{-1}

Word form: eighty nine hundredths

591.65 5.9165×10^2

Standard form: 5.916×10
Rough work

Word form: $\frac{59165}{10000} \times 1000$
 $\Rightarrow 591.65$

Five hundred ninety one and
Sixty five hundredths.

value by virtue of place is 90

19.85
Standard form: 1.985×10^1

Word form Nineteen and eighty
five hundredths

3.96
Standard form: 396×10^0

Word form: Three and ninety
six hundredths

Place value (9): 9 Tenths

What happens to the value
of each number?

Change the 8 in 35.86 to 7.
The ^{value} number of the value
decreases by 1: 35.86
 -00.10

Change the 2 in 1.02 to 6.
The ^{value} number of the value
increases by 0.04: 1.02
 $+0.04$
1.06

Change the 3 in 3,460 to 9.
The value of number increased
by ~~6000~~ 6000: 3460
 $6000 + 6000$ Ten Ten
9,460 3460

Change the 1 in 8.17 to 6.
The value of the number increase
by 5: 8.17
 $+0.50$
8.67

ones

Change the 5 in 8.35 to 1.

The value of the number decreases by 0.04: 8.35

$$\begin{array}{r} 8.35 \\ -0.04 \\ \hline 8.31 \end{array}$$

(here the 5 is in hundredth place)

Circle the numbers that have an 8 with the value of 8 tenths.

457.68 × 1.8 8.09 × 35.85
388.1 ~~388.1~~ ×

Circle the number that have a 5 value of 5 hundredths.

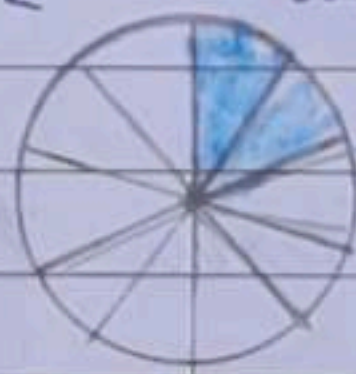
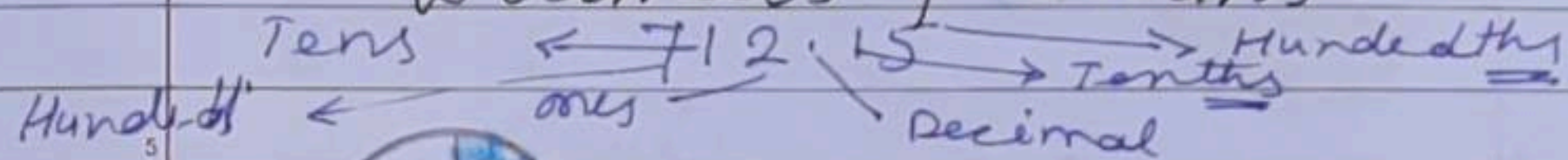
550.7 5.25 99.25 16.53
68.85

Circle the numbers that have an 8 with the value of 8 tenths.

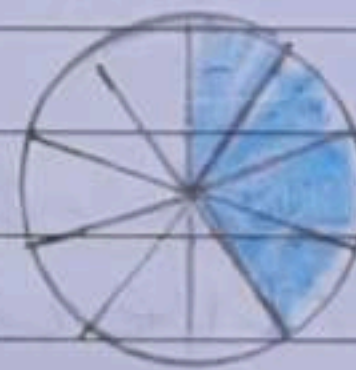
3,603.3 0.93 32.45 5.33
23.53
Tenths Tenths

WORK SHEET

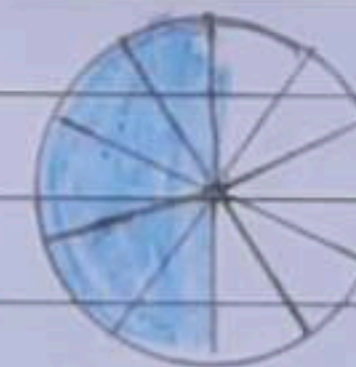
Decimals of Tenths



$\frac{2}{10}$, 0.2, Two tenths



$\frac{4}{10}$, 0.4, four tenths



$\frac{5}{10}$, 0.5 Five tenths



$\frac{6}{10}$, 0.6 six tenths



$\frac{1}{10}$, 0.1 one tenths



$\frac{9}{10}$, 0.9 Nine tenths



$\frac{3}{10}$, 0.3 Three tenths



$\frac{5}{10}$, 0.5 ~~Three~~ Five tenths

Bodmas

B: Bracket (), [], { }

O: of

D: Divide \div

M: multiply \times

A: Addition $+$

S: subtraction $-$

Questions:-

$$(12-3) \times (12-6) = ?$$

1st we will operate the brackets

$$\Rightarrow 9 \times 6$$

$$\Rightarrow 54 \text{ answer.}$$

$$3+5+(10+2) = ?$$

$$\Rightarrow 3+5+12$$

$$\Rightarrow 8+12$$

$$\Rightarrow 20 \text{ answer.}$$

$$(40 \div 5) \times 5 + 5 = ?$$

$$\Rightarrow 8 \times 5 + 5$$

$$\Rightarrow 40 + 5$$

$$\Rightarrow 45$$

$$(9-3)+10 \times 4 =$$

$$\Rightarrow 6 + 10 \times 4$$

$$\Rightarrow 6 + 40$$

$$\Rightarrow 46$$

$$8+20-(4 \times 3) =$$

$$\Rightarrow 8+20-12$$

$$\Rightarrow 28-12$$

$$\Rightarrow 16$$

$$5 \times 6 + (9-3) =$$

$$\Rightarrow 5 \times 6 + 6$$

$$\Rightarrow 30 + 6$$

$$\Rightarrow 36$$

$$24 \div 6 + (8+9) =$$

$$\Rightarrow 24 \div 6 + 17$$

$$\Rightarrow 4 + 17$$

$$\Rightarrow 21$$

$$4+12-(30 \div 6) =$$

$$\Rightarrow 4+12-5$$

$$\Rightarrow 16-5$$

$$\Rightarrow 11$$

~~$$3 + (40 \div 10 \div 2)$$

$$\Rightarrow 3 + 10 \div 2 = 2$$

$$\Rightarrow 3 + 5$$

$$\Rightarrow$$~~

$$3 + (40 \div 10) \div 2$$

$$\Rightarrow 3 + (4) \div 2$$

$$\Rightarrow 3 + (2)$$

$$\Rightarrow 3 + 2$$

$$10 \overline{) 40} \quad (4 \quad 2) \quad 4 \quad 2$$

$$\underline{40}$$

$$0$$

$$2 + (9 \times 5) + 6$$

$$\Rightarrow 2 + 45 + 6$$

$$\Rightarrow 47 + 6$$

$$\Rightarrow 53$$

Worksheet

CONVERT 'mm' TO 'cm'

→ NOTE: To convert mm to cm you should multiply it by 0.1

$$\frac{1}{10}$$

→ Example: $3 \text{ mm} = 3 \times 0.1 = 0.3$

Questions: $36 \text{ mm} = 3.6 \text{ cm}$

Sol $36 \times 0.1 = 3.6$

$$\begin{array}{r} 36 \\ \times 0.1 \\ \hline 3.6 \end{array}$$

$36 \text{ mm} = \square \text{ cm}$
 $36 = 3.6 \text{ cm}$

$$\frac{36}{10} = 3.6 \text{ cm}$$

$52 \text{ mm} = 5.2 \text{ cm}$ $52 \text{ mm} = \square \text{ cm}$

Sol $52 \times 0.1 = 5.2$

$$\begin{array}{r} 52 \\ \times 0.1 \\ \hline 5.2 \end{array}$$

$52 = 5.2 \text{ cm}$

$$\frac{52}{10} = 5.2 \text{ cm}$$

$96 \text{ mm} = 9.6 \text{ cm}$ $96 \text{ mm} = \square \text{ cm}$

Sol $96 \times 0.1 = 9.6$

$$\begin{array}{r} 96 \\ \times 0.1 \\ \hline 9.6 \end{array}$$

$96 = 9.6 \text{ cm}$

$$\frac{96}{10} = 9.6 \text{ cm}$$

NOTE:
To convert mm in cm divide the number with 10

$93 \text{ mm} = 9.3 \text{ cm}$

Sol $93 \times 0.1 = 9.3$

$$\begin{array}{r} 93 \\ \times 0.1 \\ \hline 9.3 \end{array}$$

$40 \text{ mm} = 4.0 \text{ cm}$

Sol $40 \times 0.1 = 4.0$

$$\begin{array}{r} 40 \\ \times 0.1 \\ \hline 4.0 \end{array}$$

$40 \text{ mm} = \square \text{ cm}$
 $\frac{40}{10} = 4.0 \text{ cm}$

$99 \text{ mm} = 9.9 \text{ cm}$

Sol $99 \times 0.1 = 9.9$

$$\begin{array}{r} 99 \\ \times 0.1 \\ \hline 9.9 \end{array}$$

$99 \text{ mm} = \square \text{ cm}$
 $\frac{99}{10} = 9.9 \text{ cm}$

$89 \text{ mm} = 8.9 \text{ cm}$

Sol $89 \times 0.1 = 8.9$

$$\begin{array}{r} 89 \\ \times 0.1 \\ \hline 8.9 \end{array}$$

$89 \text{ mm} = \square \text{ cm}$
 $\frac{89}{10} = 8.9 \text{ cm}$

$38 \text{ mm} = 3.8 \text{ cm}$

Sol $38 \times 0.1 = 3.8$

$$\begin{array}{r} 38 \\ \times 0.1 \\ \hline 3.8 \end{array}$$

$38 \text{ mm} = \square \text{ cm}$
 $\frac{38}{10} = 3.8 \text{ cm}$

$$85 \text{ mm} = 8.5 \text{ cm}$$

$$85 \text{ mm} = \square \text{ cm}$$

$$\begin{array}{r} 85 \\ 10 \end{array} = 8.5 \text{ cm}$$

$$39 \text{ mm} = 3.9 \text{ cm}$$

$$39 \text{ mm} = \square \text{ cm}$$

$$\begin{array}{r} 39 \\ 10 \end{array} = 3.9 \text{ cm}$$

$$15 \text{ mm} = 1.5 \text{ cm}$$

$$15 \text{ mm} = \square \text{ cm}$$

$$\begin{array}{r} 15 \\ 10 \end{array} = 1.5 \text{ cm}$$

$$88 \text{ mm} = \square \text{ cm}$$

$$88 \text{ mm} = \square \text{ cm}$$

$$\begin{array}{r} 88 \\ 10 \end{array} = 8.8 \text{ cm}$$

E

AREA AND ITS BOUNDARY

Whose card	Length	Width	Perimeter	Area
Sanya	10 cm	8 cm	36 cm	80 sq cm
Manan	11 cm	11 cm	44 cm	121 sq cm
Aarushi	10 cm	8 cm	36 cm	80 sq cm
Khalid	10 cm	10 cm	40 cm	100 sq cm

b) ~~Aa~~ Sanya, Aarushi, Manan and Khalid made greeting cards complete the table for their greeting card:

Aarushi: Given = Area 80 sq cm
Breath 8 cm
Length: ? ~~Breath~~: ? Perimeter ?

$$\text{Area} : L \times B$$

$$80 : L \times 8$$

$$L \times 8 = 80$$

$$\frac{80}{8} = 10$$

Length: 10 cm

Now perimeter = $2(L+B) = P$

Adding values

$$2(10+8) = P$$

$$2(18) = P$$

$$18 \times 2 = P$$

$$36 = P$$

Peri: 36cm

Ques: Area of square: $S \times S$

Given $A = 100 \text{ sq/cm} : (S)^2$

$$P = 40 \text{ cm}$$

$$S \times S = A$$

$$2S^2 = 100 \Rightarrow S = \sqrt{100}$$

$$S = \sqrt{100}$$

$$S = 10 \text{ cm}$$

* note
 S^2 means
 $S \times S$
into multiply.

Alternative # 2 we know.

$$P = 40 \text{ cm.}$$

$$4 \times S = 40$$

$$S = \frac{40}{4}$$

$$S = 10 \text{ cm.}$$

* note
 $4 \times S$ means
 $S + S + S + S$
addition.

Use $S = 10$ as length = 10 cm

Breadth = 10 cm

Topic: MY BELT IS LONGEST

Take a thick paper sheet of length 14 cm and width 9 cm

You can also use an old postcard.

* What is its area? What is its perimeter?

Ans: Area $\Rightarrow L \times B$

$$\Rightarrow 14 \times 9$$

$$\Rightarrow (14 \times 9) \text{ (cm} \times \text{cm)}$$

$$\Rightarrow 126 \text{ sq/cm}$$

$$\text{Perimeter} \Rightarrow 2(L+B)$$

$$\Rightarrow 2(14+9)$$

$$\Rightarrow 2(23)$$

$$\Rightarrow 23 \times 2$$

$$\Rightarrow 46 \text{ cm}$$

* Now cut strips of equal sizes out of it.

Topic

SHARE THE LAND

Naseema is a farmer who wants to divide her land equally among her four children - Chumki, Itimbi and Anwar. She wants to divide the land so that each piece of land has one tree. Her land looks like this:-



3 cm

13 cm

Using tapes join the strips end to end, to make a belt.

* How long is your belt?

Ans) Area of rect $\Rightarrow L \times B$
 $\Rightarrow 126 \times 1$
 $\Rightarrow 126 \text{ sq cm or } 126 \text{ cm}^2$

* What is its perimeter?

Ans) Peri of rect $\Rightarrow 2(L+B)$
 $\Rightarrow 2(126+1)$
 $\Rightarrow 2(127)$
 $\Rightarrow 127 \times 2$
 $\Rightarrow 254 \text{ cm}$

* If each square on this page is equal to 1 sq. metre of land, how much land will each of her children get? 333 sq. metre

Chumki, Jhumri and Amran need wire to make a fence.

* Who will need longest wire for fencing?

(Ans) Yellow will need wire for fencing

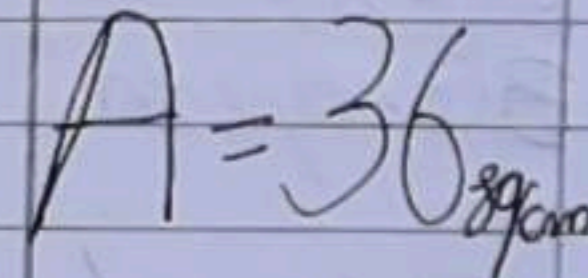
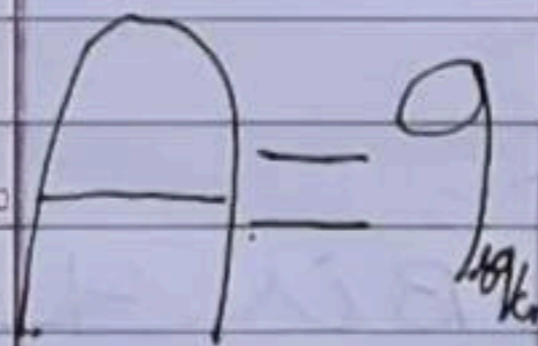
* How much wire in all the three need? 79 m

Practic time

A. Look at the table. If you were to write the area of each of these what column would you choose? Make a (✓)

	Square cm	Square meter	Square Km
Handkerchief	✓		
Sari		✓	
Page of your book	✓		
School land		✓	
Total land of your city			✓
Door of your classroom		✓	
Chair seat	✓		
Blackboard		✓	
Indian flag		✓	
Land over which a river flows.			✓

B. Draw a square of 9 sq. m. Write a on it. Draw another square; with double of the side. Write b on it.



Answer these -

a) The perimeter of square a is 12

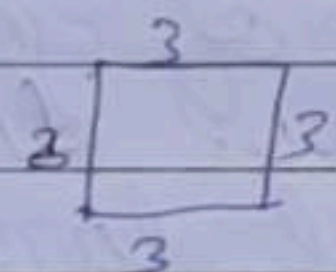
Sol Area = $S \times S$

$9 \text{ sq/cm} = (S)^2$

$(3 \text{ sq/cm}) = (S)^2$

$3 \text{ sq/cm} = S$

Side = 3 cm



Perimeter = $4 \times S$

= 4×3

= 12

b) Side of square b is 6 cm

c) Area of square b is 36 sq/cm

Sol Ar = $S \times S$

= 6×6

= $(6 \times 6) \text{ (cm} \times \text{cm)}$

= 36 sq/cm

d) The area of square B is 4 times the area of square A.

Ans $\frac{9}{36}$
4

e) The perimeter of square c is 24 cm

Sol Peri = $4 \times S$

= 4×6

= 24

f) The perimeter of square d is 2 times the perimeter of sq a.

Sol 12

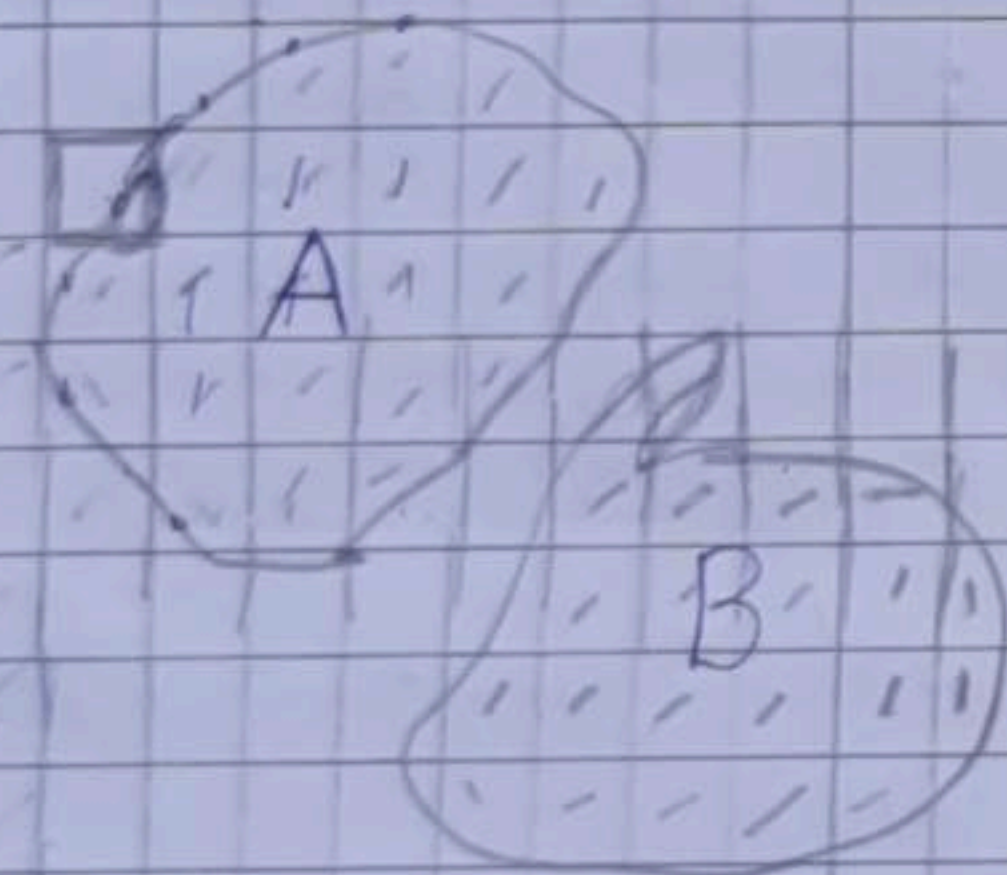
24

AREA AND ITS BOUNDARY

Thread play

Take a 15 cm long thread. Make different shapes by joining its ends on this sheet.

Ar (A): 21
Ar (B): 19



Complete square: 11.8

More than half filled: 7.9

Half filled: 3.3

Total: 21.19

A) Which shape has the biggest area? How much? _____

Ans The shape a has the biggest area, 21.19 cm

b) What is the perimeter of these shape?

The perimeter is 15 cm.

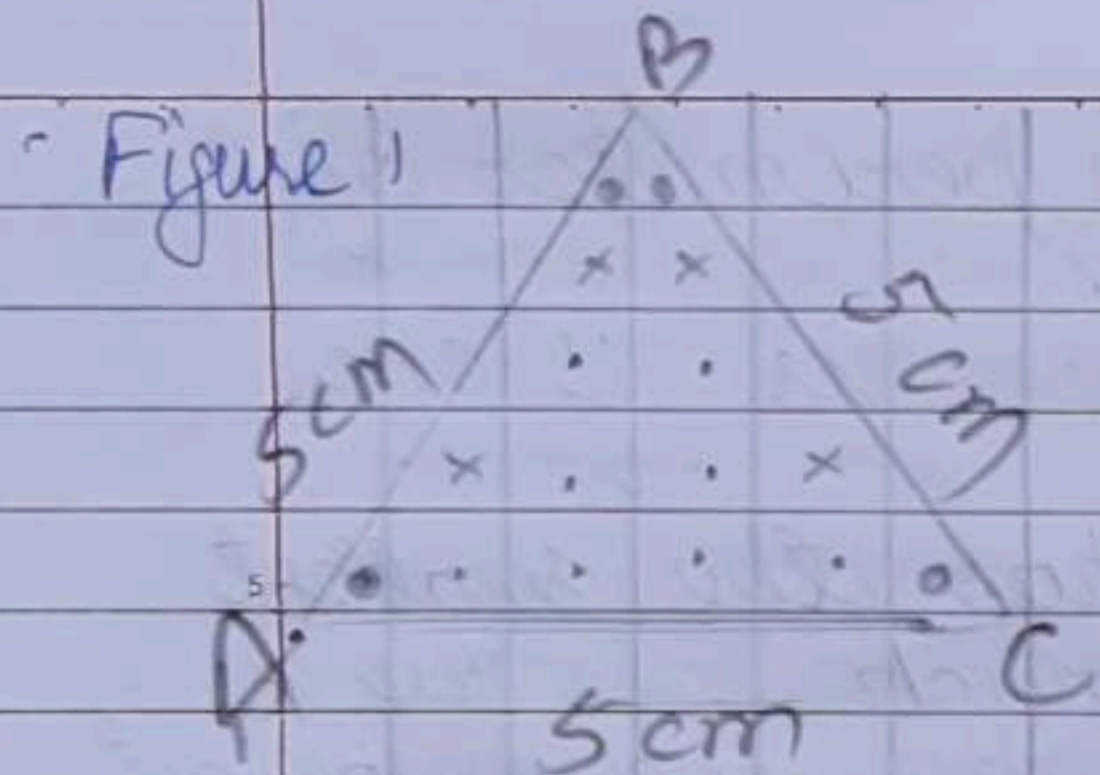
c) Which shape has the smallest area? How much _____

Sol The shape B has the smallest area. (Approx)

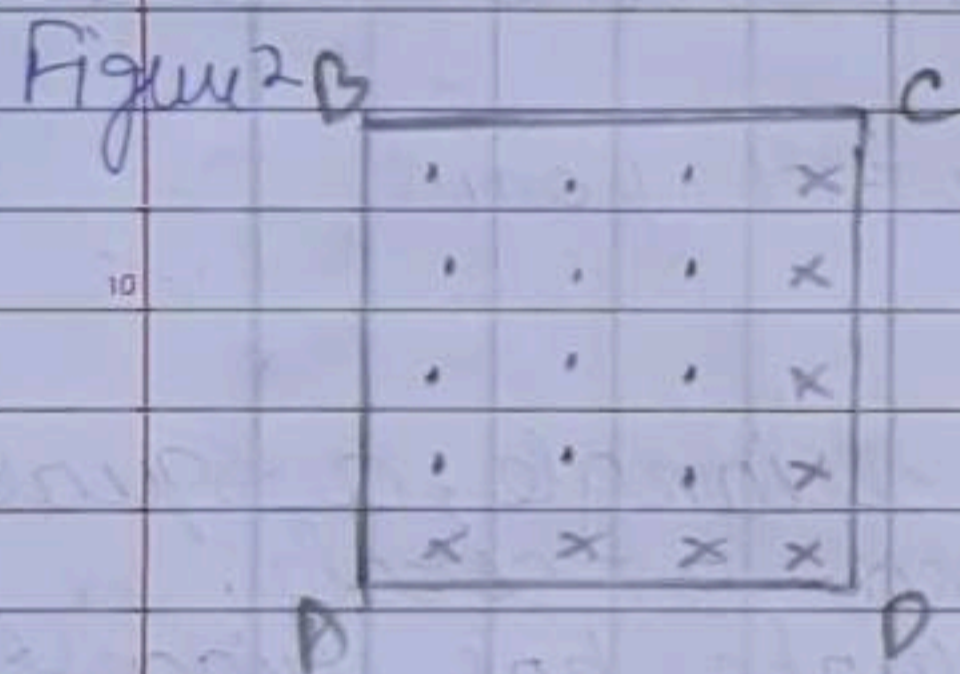
Figure B area = 19 sq/cm.

d) Also make a triangle, a square, a rectangle and a circle.

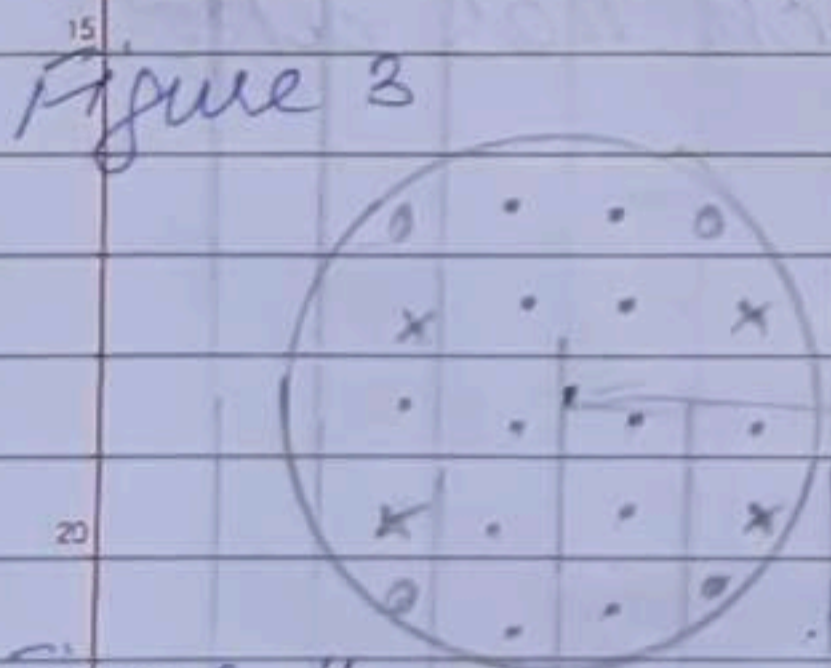
Find which shape has biggest area and which has the smallest.



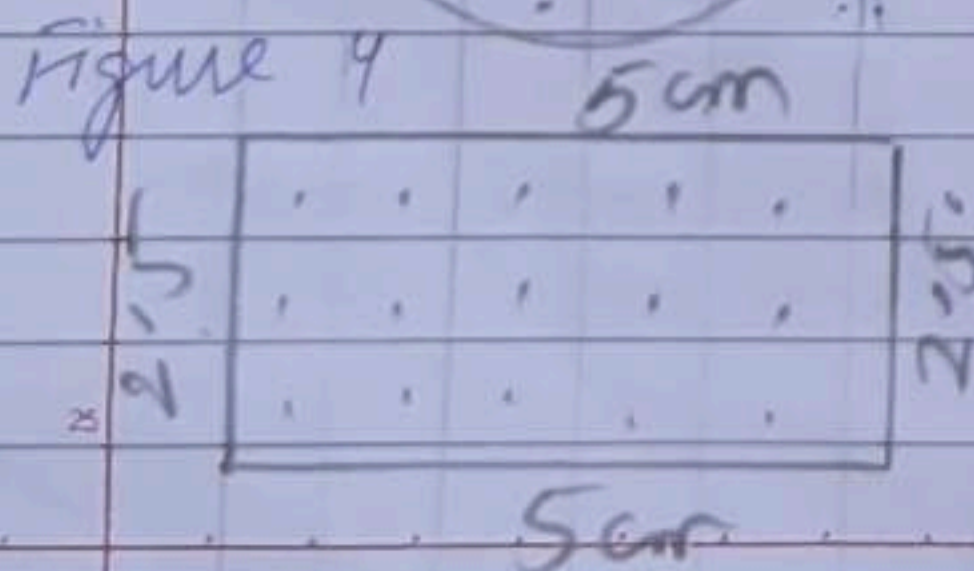
8 Full.
4 More than half
1 Less than half



12 Full
8 More than half
0 Nil



12 Full
4 More than half
4 Less.



15 full.
9 less than half

Figure 1 has 8 Boxes full.

Figure 2 has 12 Boxes full.

Figure 3 has 12 Boxes full.

Figure 4 has 15 Boxes Full.

Fig. 4 will have largest area.

Fig. 1 has smallest area.

Save the birds.

(a) How many cm is the length of the boundary of Lake A in the drawing?

(ans) 30 cm with the help of thread.

(b) What is the length of the boundary of Lake B in the drawing?

(ans) 24 cm with the help of thread.

c) How many kilometer long is the actual boundary of Lake A?

Sol Given = 1 cm = 1 km
 $\therefore 30 \text{ cm} = 30 \times 1 \text{ km}$ (multiplying 30 on both sides)
 = 30 km

d) How many kilometer long is the actual boundary of Lake B?

Sol Given = 1 cm = 1 km
 $\therefore 24 \text{ cm} = 24 \times 1 \text{ km}$ (multiplying 24 on both sides)
 = 24 km

e) A longer boundary around the lake will help more birds to lay eggs. So which lake should be kept for birds? Which lake should be kept for boats?

Ans The lake A should be kept for birds while lake B should be kept for picnics and boating.

f) Find the ^{area of} lake B on the drawing in sq. cm. what is its actual area in sq. km.

Sol The area of lake B approximately is $15 \times 1 \text{ cm}^2$ (area of each square).
 = 15 sq. cm., because it has 15 full squares.

King's Story

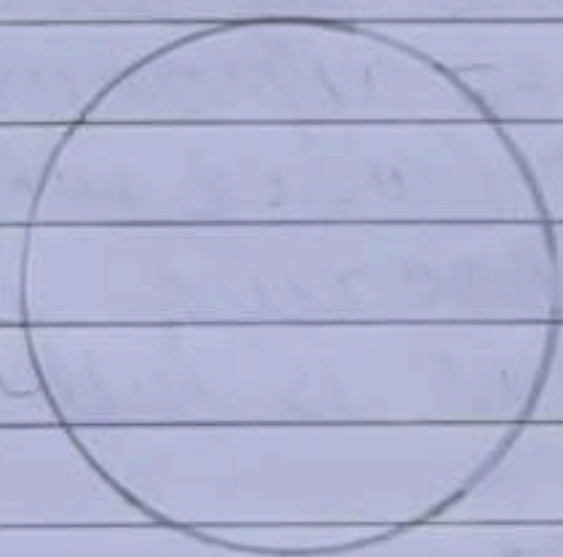
* What is its area? Is it more than the first rectangle?

Ans) Area Rectangle A = 400 sq. m
 Area Rectangle B = length \times breadth
 $= 30 \text{ m} \times 20 \text{ m}$
 $= 600 \text{ sq. m}$

* What other rectangle can he make with 100 meters of wire? Discuss which of these rectangles will have the biggest area.

Ans) Perimeter = $2(L+B)$ | $2(L+B)$
 $= 2(48+2)$ | $2(42+8)$
 $= 2(50)$ | $2(50)$
 $= 50 \times 2$ | 100 sq. cm
 $= 100 \text{ sq. cm}$

* Why did Cheegu not use a rectangle? Explain.

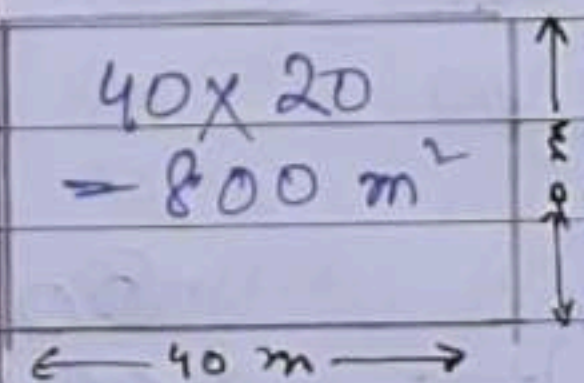


area of $\odot = 800 \text{ sq. cm.}$

Ans) Cheegu not choose a rectangle because its maximum area was 600 sq. m but circle maximum area was 800 sq. m . That is why Cheegu not choose a rectangle.

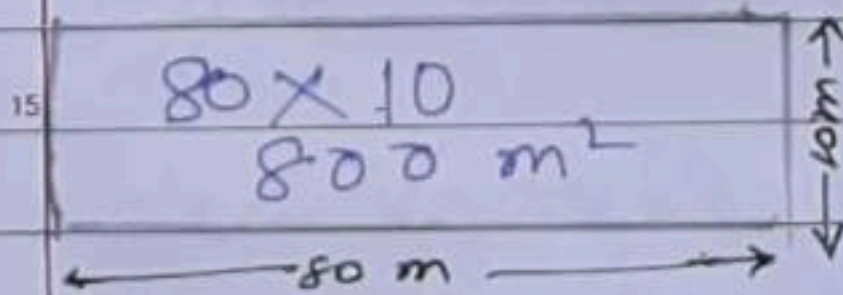
as by choosing rectangle he will get only 600 m^2 which is 200 m^2 less than the area of circle.

* He made rectangles A, B and C of different sizes. Find out the length of the boundary of each



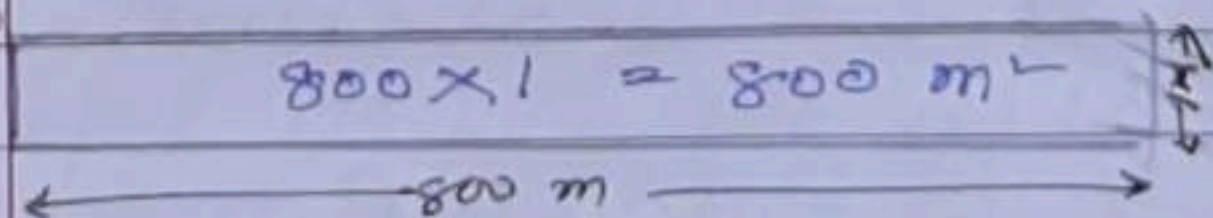
area 800 sq. m
Perimeter $2(L+B)$
 $2(40+20)$
 $2(80)$

160 m



area 800 sq. m (LxB) 80×10
Perimeter $2(L+B)$
 $2(80+10)$
 $2(90)$

180 m

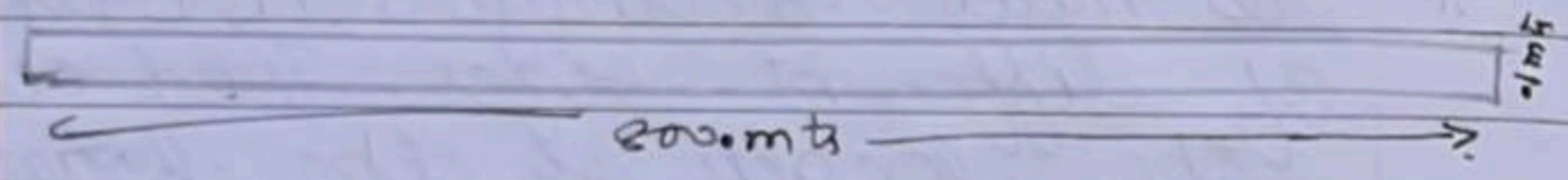


area 800 sq. m
Perimeter $2(L+B)$
 $2(800+1)$

$2(801) \Rightarrow 1602 \text{ m}$

Lesson - 12

smart charts SMART CHARTS



$$\begin{aligned} \text{Area} &= L \times B \\ &= 8000 \times 0.1 \\ &= 8000 \times \frac{1}{10} \\ &= 800 \text{ sq. m.} \end{aligned}$$

$$\begin{aligned} \text{Perimeter} &= 2(L+B) \\ &= 2(8000+0.1) \\ &= 2(8000.1) \\ &= 16000.2 \end{aligned}$$

ANIMAL	TALLY MARKS	NUMBER
CATS		24
DOGS		32
RABBITS		10
COWS		22
PARROTS		8
GOATS		20
SQUIRREL		15
		131

Look at the tally marks and write the number for each animals in the table. How many children in all did Yomini talk to?

Ans In all Yomini talk to 131 animals.

* Which is the most favourite pet animal in this table?

Ans) Dog, 32

* Which pet will you like to have? What will you name it? Which other animals can be...

kept at home? Discuss.
Ans Cow, Beside cow dog, Ponds, Gotes, Cats and Rabbits can be kept at home

	Tally Marks	Number
		3
Cycle		28
Car		12
Auto		18
Bus		15
Cycle R		24
Truck		6
		<u>103</u>

* Write the number of each vehicle in the table.

* How many vehicle in all did Sumita see on the road in half an hour?

Ans 103

* Auto rickshaws are thrice the number of truck - True/False

Ans True.

* Make tally marks for 7 more buses and 2 more trucks

	TALLY MARKS	NUMBER
Buses		22
Trucks		8

Helping hands


Help most in house work	Number of children
Going to market	97
Washing utensils	15
Washing clothes	3
Making, severing food	25
Cleaning the house	10
	<u>100</u>

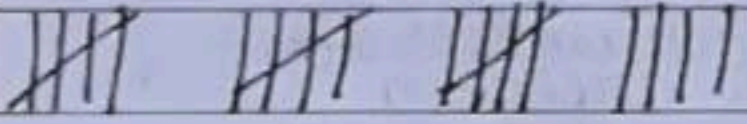
WORKSHEET ①

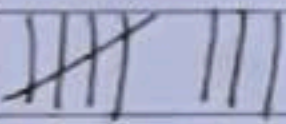
Counting Tally Marks

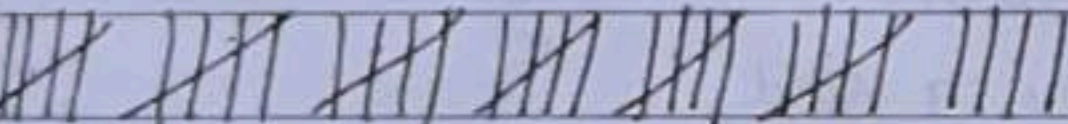
Ques: Write the number of tally marks in each questions.

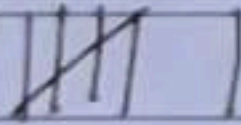
1)  : 27


2)  : 15

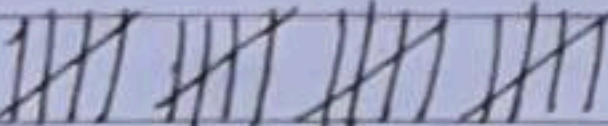
3)  : 19


4)  : 8

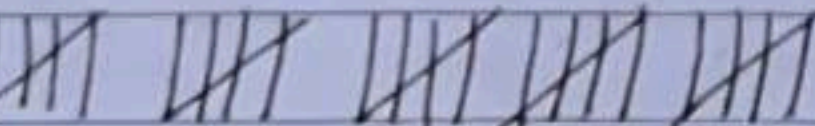
5)  : 34

6)  : 6

7)  : 23

8)  : 20

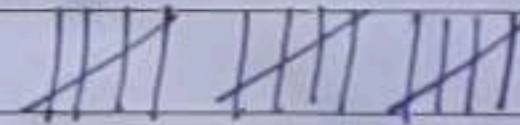
9)  : ~~18~~ 17

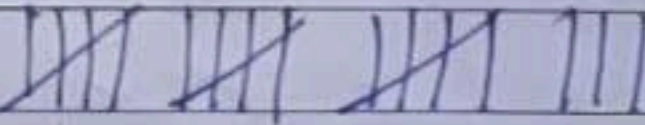
10)  : 25

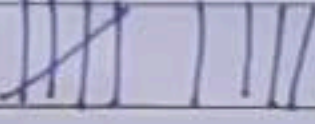
WORKSHEET ②

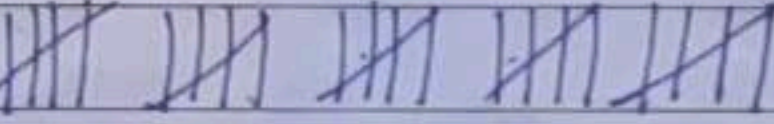
Drawing Tally Marks


Draw tally marks to show each number.

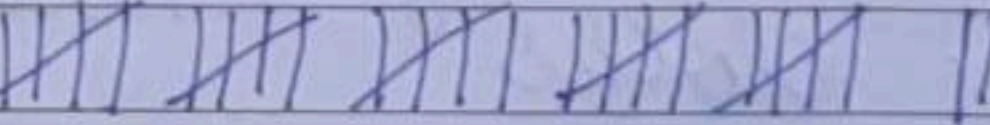
15 : 

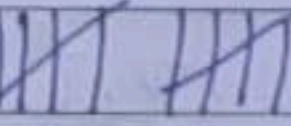
18 : 

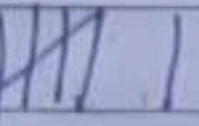
9 : 

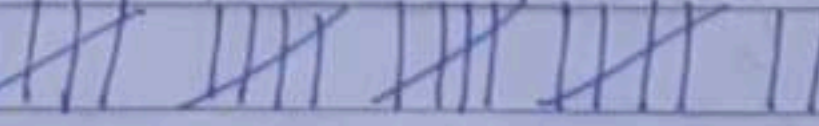
25 : 

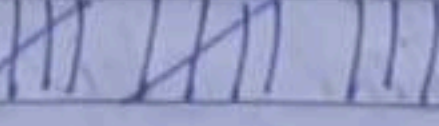
31 : 

27 : 

10 : 

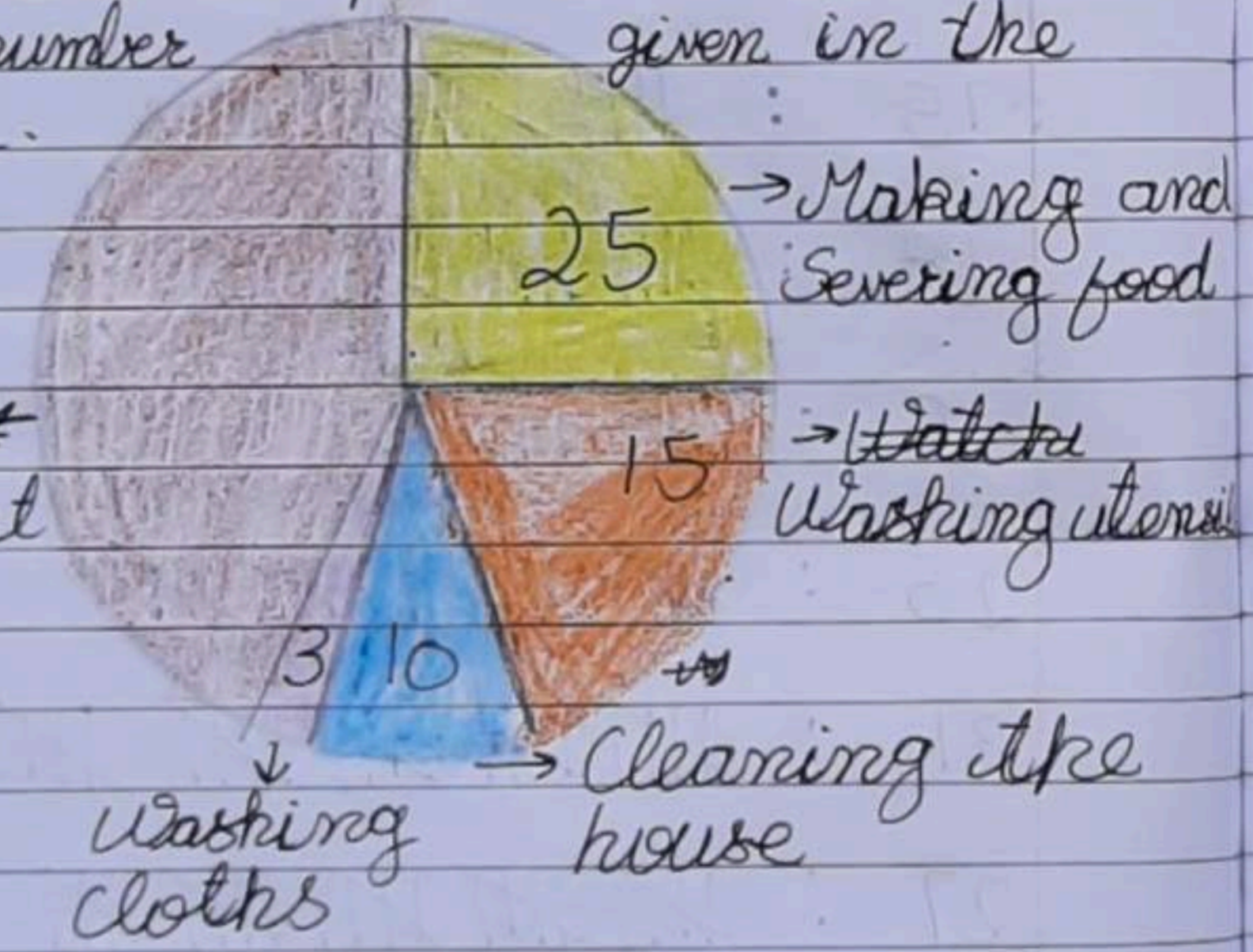
6 : 

22 : 

13 : 

[CHAPTER:12]
SMART CHARTS

Ques 1) ~~Look and~~ Find out how ^{you} can fill the chapati chart to show the number given in the table.



[2] Practice time: After school

What did they like to do after school	Number of children
Watching TV	2
Playing football	5
Reading story book	1
Doing home-work	8
Eating lunch	2
Sleeping	5
Total:	23

[1] Look and find out.

Ques 2) Children who help in severing or making food are:

- 1/3 of the total children
- 1/2 of the total children
- 1/4 of the total children ✓

CHAPTER: 12
Smart charts

AD MAO!!

Ragini loves to watch cartoon on television. One day she thought of counting the number of ads during the breaks. She found that in each break there were 14 advertisements. 10 of those ads there were children as actor

* Why do you think that children are used in so many ads?

Ans) Children are used in so many ads because ~~if~~ children watch most TV in home and if children saw those ads they will feel that I also want this and if they use Bollywood actors they will charge more.

+ Use tally marks to count the number of ads during a short break in a programme.

S.NO	BREAK	NO. OF ADS	TALLY MARKS
1	Break 1	14	IIII
2	Break 2	20	IIII IIII
3	Break 3	5	
4	Break 4	17	IIII IIII
5	Break 5	20	IIII IIII

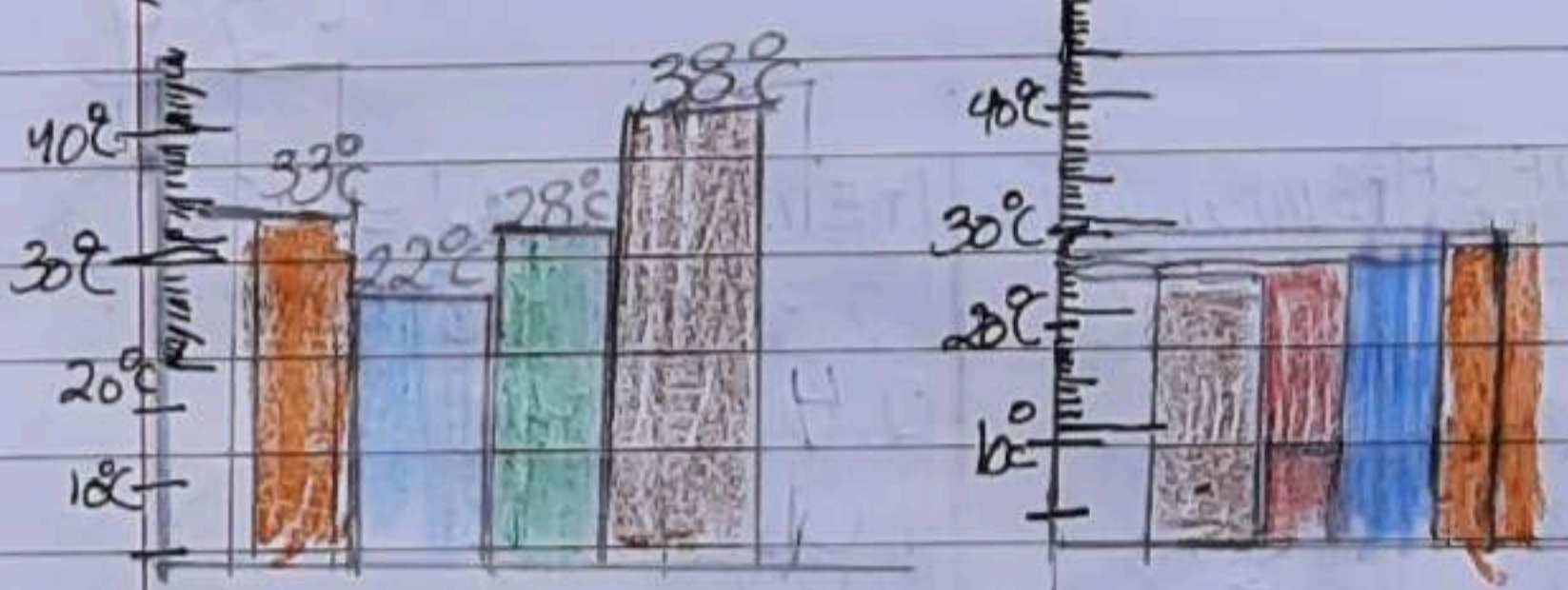
* TRY YOURSELF

Next time when you watch you TV programme, count the number of advertisements during each break. Use tally marks put a dot below the tally when you find children in any advertisement.

SNO	BREAK	NO OF ADS	TALLY MARKS
1	Break 1	14	
2	Break 2	20	
3	Break 3	5	
4	Break 4	17	
5	Break 5	20	

CHAPTER: 12

(SMART CHARTS) [HOT AND COLD]



1 JUNE

1 DECEMBER

Find out from the bar chart.

Q. Which city is hottest on 1 June?
Ans. The city of Jaisalmer is hottest on one June. (38°C)

Q. Which city is coldest on 1 December?
Ans. The city of Shimla is coldest on one December. (10°C)

Q. Which city shows little change in temperature of 1 June and 1 December?

Ans The city of Bangalore shows little change in two days
1 June and 1 December (28 - 24 = 4)

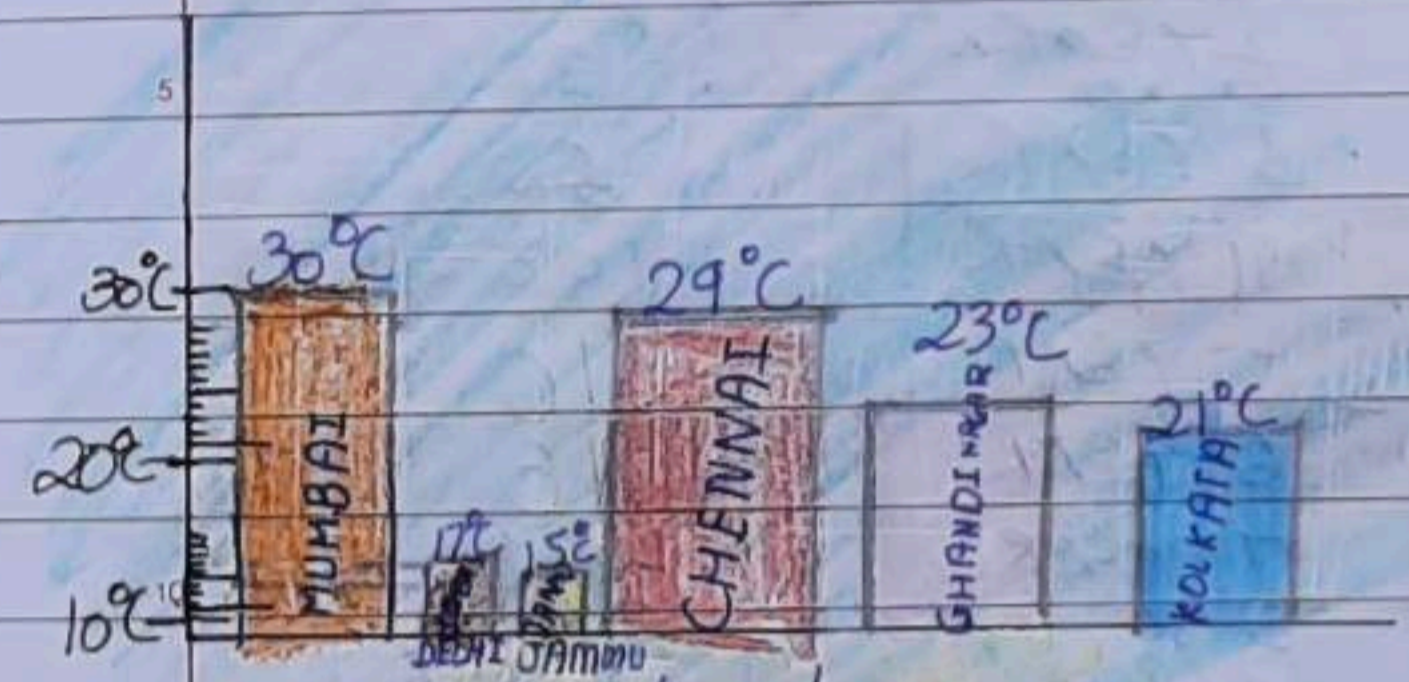
NAME OF THE CITY	TEMP, JUNE	TEMP, DEC	DIFFERENCE = 4°C
Delhi	33°C	23°C	10°C
Bangalore	28°C	24°C	4°C
Shimla	22°C	10°C	12°C
Jaisalmer	38°C	25°C	13°C

TRY YOURSELF

One or more one day choose any five cities and record their temperature from TV or newspaper.

NAME OF THE CITY	TEMPERATURE
Delhi	17°C
Mumbai	30°C
Jammu	15°C
Chennai	29°C
Ghanshyamnagar	23°C
Kolkata	21°C

Bar chart



28/01/22

RABBITS IN AUSTRALIA

Earlier there were no rabbits in Australia. Rabbits were brought to Australia around the year 1780. At that time there were no animals that ate rabbits. So the rabbits began to multiply at a very high speed.

TIME	NUMBER OF RABBITS
START	10
1 YEAR	18
2 YEAR	32
3 YEAR	58
4 YEAR	108
5 YEAR	210
6 YEAR	416
7 YEAR	864
8 Years	1728

a) After each year the number of rabbits was -

Option (a) a little less than double the number of rabbits in the last year.

b) At the end of year 6, the number of rabbits was close to

Option (a) 400

c) After which year the number of rabbits cross 1000?

Ans) After 8 years (1728) the number of rabbits cross 1000.

FAMILY TREE

Answer these questions:

1) How many grand parents in all does Shobna have?

Ans) Shobna's Dada,
Shobna's ~~dadi~~ Nani
Shobna's Nana
Shobna's Dadi ~~mother~~

2) How many great, great grand parents in all does Madhav have?

Ans) In all Madhav have 8 great, great grand parents.

3) How many elders will be in VII generation of his family.

Ans) 32

4) If he takes his family tree forward in which generation will he find 128 elders?

Ans) V Gen = 8 elders
VI Gen = $8 \times 2 = 16$ elders

VII Creon = $16 \times 2 = 32$

VIII Creon = $32 \times 2 = 64$

IX Creon = $64 \times 2 = 128$ Ans.

∴ In 9th Generation there will be 128 elders.

GROWTH CHART OF A PLANT

DAY	LENGTH OF THE PLANT IN (CM)
0	0
4	1.4
8	5.3
12	9.5
16	10.2
20	10.9

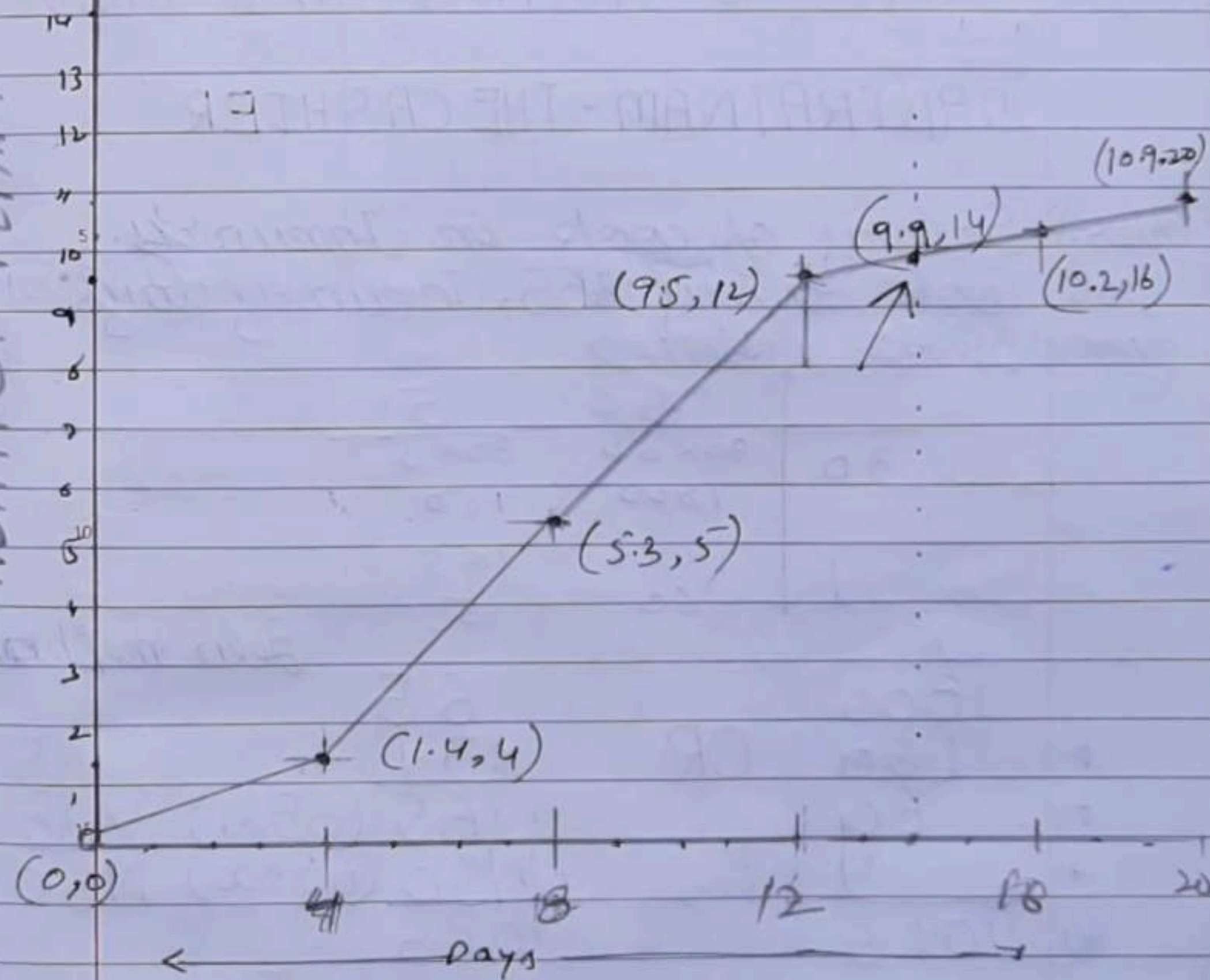
a) Between which days did the length of the plant change the most?

iii) 8-12

b) What could be the length of this plant on 14th Day?

9.9 cm

LENGTH OF PLANT



c) Will the plant keep growing all the time? What will be its length on 100th day? Make a guess!

Ans) 18 cm approx.

NO, The plant will not keep growing all the time. It will stop once it reaches its threshold after which it will grow old and dry & die.

WAYS TO MULTIPLY AND DIVIDE

MANIRATNAM - THE CASHIER

Ques 1) Salary of cook in January.
Sol Cook salary: Rs 65, January days 31.

(Bharti) BELA'S METHOD

	60	5
30	30x60 1800	30x5 150
1	1x60 60	1x5 5

1800
+ 150
+ 60
+ 5
Rs 2015

OR

Bela method
65
x 31

65 (65x1) x 30
+ 1950 (65x30) 1950
2015

Factor
(30+1)

Ques 2) Salary of minister in January
BY BHARTI METHOD.
Salary / day = 195 (Rs)
days in Jan = 31

	100	95
30	3000	2850
1	100	95
Adding		
	3000	2850
	100	95
	<hr/>	
	6045	

BY BELA METHOD.

Factor (30+1)

195
x 31

195 (195x1) x 30
5850 (195x30) 5850
6045

PRACTICE TIME

1) Use Bela's method to multiply these numbers.

Sol Factor: 40+6

-104

$$\begin{array}{r} 32 \times 46 \\ \underline{192} \quad (32 \times 6) \\ + 1280 \quad (32 \times 40) \\ \hline 1472 \end{array}$$

6) 67×18 Factor: $10+8$

$$\begin{array}{r} 670 \quad (67 \times 10) \\ + 536 \quad (67 \times 8) \\ \hline 1206 \end{array}$$

2) Do these in your notebook using Bela's method.

a) 47×19 OR 47×19 (Factor: $10+9$)

$$\begin{array}{r} 423 \quad (47 \times 9) \\ 47 \times \quad (47 \times 10) \\ \hline 893 \end{array}$$

(Factor: $50+7$)

b) 63×57 OR 63×57

$$\begin{array}{r} 441 \quad (63 \times 7) \\ 315 \times \quad (63 \times 50) \\ \hline 3591 \end{array}$$

(Factor: $10+2$)

c) 360×12 OR 360×12

$$\begin{array}{r} 720 \quad (360 \times 2) \\ 360 \times \quad (360 \times 10) \\ \hline 4320 \end{array}$$

~~188×91~~ d) 188×91

$$\begin{array}{r} 188 \\ \times 91 \\ \hline 1692 \\ + 1708 \\ \hline 17108 \end{array}$$

(Factor: $90+1$)

188×91

$$\begin{array}{r} 188 \quad (188 \times 1) \\ + 16920 \quad (188 \times 90) \\ \hline 17108 \end{array}$$

(Factor: $20+2$)

e) 225×22 OR 225×22

$$\begin{array}{r} 450 \quad (225 \times 2) \\ 450 \times \quad (225 \times 20) \\ \hline 4950 \end{array}$$

(Factor: $40+2$)

f) 163×42 OR 163×42

$$\begin{array}{r} 326 \quad (163 \times 2) \\ 652 \times \quad (163 \times 40) \\ \hline 6846 \end{array}$$

54 + 33
1+ 1x22
32

Shantaram a special cook
Days = 28
Each day = Rs 165
In all = ?

Sol) Salary of 1 day = 165
Salary of 28 days = 165×28
= 4620

165
x 28

1320 (165x8)
+ 3300 (165x20)

4620

(Factor: 20+8)

Ques 2) If he is called for all days of the year, how much salary will he get?

Sol Sal 1 day = 165
Sal 365 days = 165×365
= 60225

165 (Factor: 300+60+5)
x 365

825 (165x500)
+ 9900 (165x60)
+ 49500 (165x300)

Rs 60225 Ans -

3 42 2x
53 12

Ques 3) Now find the salaries of the minister and horse rider for 1 year?

Sol) Minister:
Minister's salary for 1 day = Rs 195

Minister's salary for 1 year (365 D)
Rs 195×365

= 71175

(Factor: 300+60+5)

195
x 365

975 (195x5)
11700 (195x60)
58500 (195x300)

71175

Ans Rs 71175

Horse rider:

Horse rider's salary for 1 day = Rs 76

Horse rider's salary for 365 days
 76×365

= 27740 Rs

$$\begin{array}{r}
 365 \text{ (Factor: } 70+6) \\
 \times 76 \\
 \hline
 2190 \text{ (} 365 \times 6) \\
 25550 \text{ (} 365 \times 70) \\
 \hline
 27740
 \end{array}$$

Years and Years

a) Soham drink = 8 glasses
* 1 months = ?

Sol 1 day = 8 glasses
30 days = 8×30
= 240 glasses.

* How many glasses will he drink in 1 year?

Sol 1 day = 8 glasses
365 days = 8×365
= 2920 glasses.

* If 125 people of a colony drinks 8 glasses of water everyday, how much water will they drink in 1 year?

Sol No. of glasses of water a person drinks in a day: 8 glasses

no. of glasses of water 125
people drink in 1 day: 125×8
= 1000 glasses

no. of glasses of water 125
people drinks in 1 year = 1000×365
= 365000
→ 365000 glasses.

b) In 1 min = 72 times
In 1 hour = ? times

We know: 1 hour = 60 min
Sol no. of times Soha's heart beats in 1 min = 72 times
no. of times Soha's heart beats in 1 hour = (i.e. 60 min) = 72×60
= 4320 times

* In 1 min = 72 times
In 1 day = 72×24 ?

We know: 1 day = 24 hours

Sol no. of times Soha's heart beats in 1 day = 72×24
= 1728
= 103680 times

$$\begin{array}{r}
 4320 \\
 \times 24 \\
 \hline
 17280 \\
 8640 \times \\
 \hline
 103680 \text{ times}
 \end{array}$$

Solved previously

* In 1 min = 72 times, 1 hour = 4320 times
In 1 week = 7 times 1 day = 103680 times

We know: 1 week = 7 days

Sol 1 min = 72 times, 1H = 4320 times, 1D = 103680 times
7 days = ~~7~~ × 103680 times
= ~~5~~ 725760 times

c) A baby elephant drinks around 12 L of milk everyday. How much milk will it drink in two years?

Sol no. of days in 2 years = $365 \times 2 = 730$

Baby elephant drinks milk in 1 day = 12 L

Baby elephant drinks milk in 2 years = $730 \times 12 = 8760$

(Factor: 10 + 12)

$$\begin{array}{r} 730 \\ \times 12 \\ \hline 1460 \quad (730 \times 2) \\ 7300 \quad (730 \times 10) \\ \hline 8760 \end{array}$$

d) Baby whale drink = 200L milk per day.

8 months Baby whale = [?] milk drinks

Sol 1 day = 200L
30 day = $200 \times 30 = 6000$

In 8 months = $8 \times 6000 = 48000$ Lts

* In how many days your family will drink will drink 200L milk?

Sol Our family drinks 2L per day.

$$\begin{array}{r} 2 \times \square = 200 \\ \square = 200 \div 2 \\ \square = 100 \text{ days} \end{array}$$

We know: 1 m = 30 days

$\therefore \square = 3 \text{ months}$

$$30 \times \square = 100$$

$$\square = 100 \div 30$$

note

$$D + D + \dots + D = 10 \times D$$

group in 30.

$$(D \dots) + (D \dots) + (D \dots) + D + D + D + D + \dots$$

$$\overbrace{30 + 30 + 30}^{100} + 10 \Rightarrow$$

$$30 \overline{) 100} \quad (3$$

$$\underline{90}$$

$$10$$

3 months 10 days.

Karunya - The landlord

Karunya brought 3 fields.

Dim: Field A:

$$L = 27 \text{ mts}$$

$$B = 28 \text{ mts}$$

$$\begin{aligned} \text{Area} &= L \times B \\ &= 27 \times 28 \\ &= 756 \text{ sq mts}^2 \text{ or sq mts} \end{aligned}$$

Dim: Field B.

$$L = 36 \text{ mts}$$

$$B = 12 \text{ mts}$$

$$\begin{aligned} \text{Area} &= L \times B \\ &= 36 \times 12 \\ &= 432 \text{ mts}^2 \text{ or sq mts} \end{aligned}$$

Dim: Field C

$$L = 27 \text{ mts}$$

$$B = 19 \text{ mts}$$

$$\begin{aligned} \text{Area} &= L \times B \\ &= 27 \times 19 \\ &= 513 \text{ m}^2 \end{aligned}$$

$$513 \text{ sq mts}$$

Field A rate: 95 mts²
 Field B rate: 110 mts²
 Field C rate: 120 mts² for
 a square metre.

$$\begin{aligned} \text{Cost field A} &: \text{Rs } 95 \text{ per sq mts} \\ \text{Area Field A} &: 756 \text{ sq mts} \\ 1 \text{ sq m} &= 95 \\ 756 \text{ sq mts} &= 756 \times 95 \\ &= \text{Rs } 71820 \end{aligned}$$

$$\begin{aligned} \text{Cost of field B} &= 110 \text{ per sq mts} \\ \text{Area Field B} &= 432 \text{ sq mts} \\ 1 \text{ sq m} &= 110 \\ 432 \text{ sq mts} &= 110 \times 432 \\ &= 47520 \text{ Rs} \end{aligned}$$

$$\begin{aligned} \text{Cost of field C} &= 120 \text{ per sq mts} \\ \text{Area Field C} &= 513 \text{ sq mts} \\ 1 \text{ sq m} &= 120 \\ 513 \text{ sq mts} &= 120 \times 513 \\ &= 61560 \end{aligned}$$

24

1- Cost of all 3 fields = ?

Sol

7 1 8 20	Field A
+ 4 7 5 20	Field B
+ 6 1 5 60	Field C
<hr/>	
Rs 18 0 9 00	

Ques 2) Julsi and her husband work on Karunya's farm. The Government has said that workers should ~~not~~ be paid at least Rs 71 for one day's work. But he pays Rs 55 to Julsi and Rs 58 to her husband.

* If Julsi work for 49 days, how much money does she get? ₹2695

Sol

1 day	= Rs 55
49 day	= Rs 55 × 49
	= 495
	<u>220 ×</u>
Ans:	₹ 2695

3

* If her husband works for 42 days, how much money does he get? ₹2436

Sol)

1 day	= ₹ 58
42 days	= ₹ 58 × 42
	= 116
	<u>232 ×</u>
	2436

* Together they earn:

	2 6 9 5
	+ 2 4 3 6
	<hr/>
Rs.	5 1 3 1

L83 WAYS TO MULTIPLY AND DIVIDE

Kurumiya - the landlord.

STATE	Salaries for 1 day
HARYANA	Rs. 135
RAJASTHAN	Rs. 73
MADHYA PRADESH	Rs. 97
ORISSA	Rs. 75

The table shows the amount fixed by four states.

- a) For farm work highest = ?
For farm work lowest = ?

Ans Haryana highest
~~Orissa~~ lowest
Rajasthan

- (b) Bhairon Singh is a worker in Rajasthan. If he works for 8 weeks how much will he earn?

Ans Bhairon Singh 1 day sal = ₹73
Sal for 7 days (1 week) = ₹73 × 7
= 511
Sal for 56 days (8 weeks) = 511 × 8
= 4088 Rs

- c) Neelam works in Haryana. If she works for $2\frac{1}{2}$ months on the farm, how much will she earn?

$$2\frac{1}{2} = \frac{(2 \times 2) + 1}{2} = \frac{4 + 1}{2} = \frac{5}{2}$$

Sol) no. of days in $2\frac{1}{2}$ months
= $30 \times 2 + 30 \times \frac{1}{2}$

$$= 60 + \frac{30 \times 1}{2}$$

$$= 60 + 15$$

= 75 days. i.e. we need to calculate the salary for 75 days

Salary for one day = Rs 135
Salary for 75 days = Rs 135 × 75
= ₹10125

- d) How much more will a farmer in Madhya Pradesh get than a worker in Orissa after working for 9 weeks?

Sol Sal for 1 day in MP = 97

Sol for 7 days in MP = 97×7
= 679

Sal for 63 days (9 weeks) in MP = 619×9
= 6111

Oissa =

Sal for 1 day in Oissa = 75

Sal for 7 days in Oissa = 75×7
= 525

Sal for 63 days (9 weeks) in Oissa = 525×9
= 4725

Difference = $\begin{array}{r} 6111 \\ - 4725 \\ \hline 1386 \end{array}$

\therefore Farmer of MP get Rs 1386 more than
Farmer of Oissa.

Number	Square	Number	Square
1	1	11	121
2	4	12	144
3	9	13	169
4	16	14	196
5	25	15	225
6	36	16	256
7	49	17	289
8	64	18	324
9	81	19	361
10	100	20	400

Farmers in Vidarbha (Maharashtra)

* How much will he earn in 1 month?

~~Ans~~ Sol) In 1 day he earns Rs 17 as he get
Rs 1 for 1 goat.

\therefore In one month he earns $Rs 17 \times 30$
= Rs 510

* Does he earn enough to help pay the
loan every month?

Ans No

* How much will he earn in one year?

Sol) In 1 day he earns Rs 17

\therefore In 365 days he earn $Rs 17 \times 365$
Rs = 6205

* How much did the government spend
on the cows?

Sol) $\begin{array}{r} 17500 \\ - 5500 \\ \hline 12000 \end{array}$ Ans) Government spent
Rs 12000 on
the cows.

* If 9 people from her village got
cows, how much government spent in
all?

Sol In 1 cow government spent = Rs 12000
 In 9 cows government spent = Rs 12000 × 9
 = Rs 108000

* If Kamla dai spends Rs 85 a day,
 find out how much she will spend
 in one month?

Sol 1 day expenditure = Rs 85
 30 days expenditure = Rs 85 × 30
 = Rs 2550

Total expenditure = Rs = 2550

Sol 2) 1 day cow gives = 8 Lts
 30 days cow gives milk = ~~8~~ × 30
 = 240 Lts

1 L milk costs = Rs 9
 240 L milk costs = Rs 9 × 240
 = Rs 2160

Money spent on keeping the cow
 was Rs 2550 - 2160

$$\begin{array}{r}
 = 2550 \\
 - 2160 \\
 \hline
 \text{Rs } 0390
 \end{array}$$

Sol 3) Money spent on cow is more = Rs 390

WAYS TO MULTIPLY AND DIVIDE

Practice time

Q) Sukhi works on a farm. He is paid Rs 98 for 1 day. If he works for 52 days, how much will he earn?

Sol) 1 day Salary = Rs 98
52 days Salary = Rs 98 × 52
= Rs 5069

+ 98 × 52 (Factor: 50+2)
× 196 (98×2)
4900 (98×50)
5096

Q) Hariya took a ^{loan} ~~loan~~ to build his house. He has to pay Rs 2750 every month for 2 years? How much will he pay back in 2 years?

Sol) 1 year = 12 months
2 years = 12 × 2
= 24 months

Every day he has to pay Rs 2750

In 24 months he will pay = Rs 2750 × 24
= 66000

2750
× 24
1000
5500
66000

In 24 months he will pay Rs 66000

Q) Ratirom is a milk seller in the city. He sells 13 Lts of milk everyday at Rs 23 per ~~total~~ Lts. How much does he earn?

Sol Selling price 1 Lts = 23
Selling price 13 Lts = 23 × 13
= 299

23 × 13
= 69
23 ×
299

Selling price for 13 Lts of milk = Rs 299

Q) A farmer sells one litre of milk for Rs 11. In one month he sells 210 litres of milk. How much ^{does he} earn in a month?

Sol) Selling price of 1L milk = Rs 11
Selling price of 210Ls = Rs 11 × 210
= 2310 Rs

$$\begin{array}{r} 210 \\ \times 11 \\ \hline 2310 \end{array}$$

e) A company sells 1 litre of packed water for Rs 12. A shopkeeper buys 240 liters of packed water. How much does he pay?

Sol) Amount paid for 1L of packed water = Rs 12

Amount paid for 240L of packed water = 12×240
= 2880

$$\begin{array}{r} 240 \\ \times 12 \\ \hline 2880 \end{array}$$

CHAPTER 13

WAYS TO MULTIPLY AND DIVIDE

Division - Loan (or)

* Dolima took a ~~loan~~ form a friend to buy a motor for Rs 9,588. She has to pay back in ~~in~~ equal amount every month for 6 months.

Sol) $9588 \div 6$

$$\begin{array}{r} 1598 \\ 6 \overline{) 9588} \\ \underline{6} \\ 35 \\ \underline{30} \\ 58 \\ \underline{54} \\ 48 \\ \underline{48} \\ 0 \end{array}$$

Loan taken

= Rs 9588.

Time to payback

= 6 months.

Installments equal

= equal

$$\square + \square + \square + \square + \square + \square = 9588$$

$$6 \times \square = 9588$$

How many times?

* 976 children are going on a picnic. They will be taken in mini buses. 25 children can go in 1 bus. How many buses are needed?

Sol) Total students: 976

1 mini bus: 25 students can take

$$\square + \square + \dots = 976$$

$$25 \times \square = 976$$

No. of mini buses required = $976 \div 25 = 39$

$$\begin{array}{r} 25 \overline{) 976} \\ \underline{50} \\ 476 \\ \underline{475} \\ 1 \end{array}$$

note 39 Buses will carry 976 children on children will be left. who will need another bus and will travel alone.

Total Buses = $39 + 1 = 40$ Buses.

How much petrol?

* Isha has Rs 1000 with her. She wants to buy petrol. 1L petrol costs Rs 47. How many litres can she buy?

Sol Money with Isha = Rs 1000
Cost of 1L petrol = Rs 47
Litres of petrol she can buy = $1000 \div 47 = 21$

$$\begin{array}{r} 47 \overline{) 1000} \\ \underline{94} \\ 60 \\ \underline{58} \\ 20 \\ \underline{19} \\ 10 \\ \underline{94} \\ 6 \end{array}$$

$$47 + \square + \square = 1000$$

$$47 \times \square = 1000$$

$$\square = \frac{1000}{47}$$

Isha can buy 21Lts of petrol and 137 of her will be left with her.

Find out

If Isha comes to your city, how much petrol can she buy with the same money?

Sol In our city petrol costs Rs 80. If Isha comes to our city she can buy 12Lts of petrol and Rs 40 of her will be left.

$$\begin{array}{r} 80 \overline{) 1000} \\ \underline{80} \\ 200 \\ \underline{160} \\ 40 \end{array}$$

she can buy $12\frac{1}{2}$ Lts or

she can buy 12Lts and Rs 40 will be left with her.

Children's day

Children are happy today. They are celebrating children's day. Each child will get 4 colour pencils from school. The school has got 969 pencils.

Sol Total no of pencil = 969
Each student get = 4 pencils
no of student get pencil = $969 \div 4 = 242$

and one pencil will be left.

$$\begin{array}{r} 4 \overline{) 968} (242 \\ \underline{8} \\ 16 \\ \underline{16} \\ 9 \\ \underline{-8} \\ * \end{array}$$

Practice time

$$\begin{array}{r} 4 \overline{) 4228} (157 \\ \underline{4} \\ 22 \\ \underline{-20} \\ 28 \\ \underline{-28} \\ \times \end{array}$$

$$2 \overline{) 672} (32$$

$$\begin{array}{r} 63 \\ \underline{42} \\ -42 \\ \times \end{array}$$

$$\begin{array}{r} 22 \overline{) 770} (35 \\ \underline{66} \\ 110 \\ \underline{-110} \\ \times \end{array}$$

$$\begin{array}{r} 27 \overline{) 772} (28 \\ \underline{7} \\ 72 \\ \underline{-70} \\ 2 \end{array}$$

$$8 \overline{) 9872} (1234$$

$$\begin{array}{r} 8 \\ \underline{18} \\ -16 \\ 27 \\ \underline{-24} \\ 32 \\ \underline{-32} \\ \times \end{array}$$

$$\begin{array}{r} 3 \overline{) 639} (229 \\ \underline{26} \\ 379 \\ \underline{-377} \\ 2 \end{array}$$

CHAPTER: 13

WAYS TO MULTIPLY AND DIVIDE

Practicetime

576 books are to be packed in boxes. If one box has 24 books, how many boxes are needed?

Sol) Total no of books : 576
1 box contains : 24 book
Total no of boxes needed : $576 \div 24 = 24$

* ~~836 people are watching~~

$$\begin{array}{r} 24 \overline{) 576} (24 \\ \underline{-48} \\ 96 \\ \underline{-96} \\ \times \end{array}$$

$$\begin{array}{l} 24 + 24 + 24 \dots = 576 \\ 24 \times \square = 576 \\ \square = \frac{576}{24} \end{array}$$

$$\begin{array}{r} 24 \\ \underline{3} \\ 72 \\ \underline{24} \\ 96 \\ \underline{-96} \\ \times \end{array}$$

* 836 people are watching a movie in a hall. If the hall has 44 rows, how many people can sit in 1 row?

Sol no of people watching movie = 836

no of rows = 44

no of people sitting in 1 row =

$44 + 44 + \dots = 836$
 (Row 1) $44 \times \square = 836$
 $\square = 836 / 44$

$836 \div 44 = 19$

$44 \overline{) 836} (19$

44

396

$- 396$

\times

19 people can sit in on row.

Brain Tester

Shyamli brought a battery. She read on it "Life: 2000 hours". She use it throughout the day and the night. How many days will the battery run?

Sol) Life of battery = 2000 hours
No. of days the battery will run

$= 2000 \div 24$

$= 83 \text{ days}$ $24 \overline{) 2000} (83$

192

80

$- 80$

8

$3 \cdot 24$

8

192

124

$\times 3$

12

Note :-

$24 + 24 + 24 \dots = 2000$

$24 \times \square$

$= 2000$

$\Rightarrow \frac{2000}{24}$

12 days
12 night

Practic time

* A gardner bought 458 apple trees. He wants to plant 15 trees in each row. How many rows can he plant?

Sol No. of trees bought = 458

No. of trees planted in 1 row = 15

No. of rows = $458 \div 15$

$= 30$

Row

30

$\times 15$

450

$+ 8$

458

$15 \overline{) 458} (30$

$- 45$

8

0

8

$15 + 15 + 15 \dots = 458$

$15 \times \square = 458$

$\square = \frac{458}{15}$

He can plant 30 rows 15 of 8 plants will be left

How many trees would be left over?

Ans) 8 trees would left over.

More with Multiplication and Division.

* A tank is full of 3000 of water. How much water will be filled in 25 tanks? If 15 buckets can be filled with

on tank of water,
how many ~~bucket~~ buckets
in all can be filled with
the water in 25 tanks?

Sol) Capacity of water tank = 300L
25 Tanks can be filled with = ~~300~~ 300×25
= 7500L

one tank $\times 25 = ?$
300

of water.

10 No. of buckets that can be
filled with 1 tank = 15

No. of buckets that can be
filled with 25 tanks = 15×25

= 75

30 \times

375 buckets

* There are 28 laddoes in 1 kg.
How many laddoes can be
there in 12 kg? If 16 laddoes
can be packed in 1 box how
many boxes are needed to
pack all of these?

Sol) 1 kg = 28 laddoes
25 2 kg = 28×12
= 336 laddoes

~~1 box = 16 laddoes~~
~~336 boxes = $\frac{336}{16}$~~
~~5376~~

16 laddoes can be packed in = 1 Box
336 laddoes can be packed in = ? boxes

16 l = 1 B

1 l = $\frac{1}{16}$ Box

16

336 l = $\frac{1}{16} \times 336 = \frac{336}{16} = 16 \overline{)336} \begin{array}{r} 21 \\ -32 \\ \hline 16 \\ -16 \\ \hline 0 \end{array}$

21 boxes are needed to pack 336 laddoes

* There are 26 rooms in a
school. Each room has 4 plants.
If each plant needs 2 cups
of water, how much water
do we need for all?

Sol) No. of rooms in school = 26
Each room has plants = 4 plants
Total no. of plants = 26×4
= 104 plants

Water needed to 1 plant = 20 cups
 Water needed to 104 plants = 2×104
 $= 208$
 cups

5 Make the best story problem

* Each line gives a story. You have to choose the questions which makes the best story problem.

352

1) ~~325~~ children from a school went on a camping trip. Each tent had a group of 4.

a) How many ~~tents~~ children did each tent have?

b) How many tent do they need?

c) How many children are there in school?

2) A shopkeeper has 204 eggs. He puts them in an egg tray. Each tray contain 12 eggs.

a) How many more eggs will be needed?

b) How many fresh eggs he sell.

c) How many egg tray does he need?

3) Cost of 1 book = ₹17. Souru buys 23 book.

a) How much money does he have?

c) How much money does he have pay for the books?

b) What is the cost of 47 books?

Crosscheck for Harisharan

* Harisharan wanted to divide Rs 2,456 among his 4 sons. He asked his eldest son to tell him how much money each one will get.

Sol) Total money : Rs. 2456
Have to divide among : 4 people
Each will get : $2456 \div 4 = 614$

NOTE: Harisharan's eldest son's first answer was Rs 624.

This is because his dividend was 2496, which was incorrect. It actual is 2456.

614	624
x 4	x 4
2456 ✓	2496 X

4	24,56,1614
- 24	
5	
- 4	
16	
- 16	
x	

(CHAPTER: 14)

HOW BIG HOW HEAVY

Packing Cubes

* What is your guess? Who is right?
Ans Gramesh is right.

* How can Gramesh and Dinga can test their guesses before packing cubes in the boxes?
Ans Gramesh and Dinga should find the number of cubes to be fitted in the first layer and find the numbers of layers to fill the cubes. Their products gives us the total numbers of cubes that can be packed in each (box) cube. In this way, they are able to check their guesses.

check
Use Gramesh method and write

1210 cm cubes can be arranged in Box B.

area = cm²
volume = cm³

Sol) Vol = L × B × H
Vol B = 11 × 11 × 10
= 1210 cm cube

1350 cm cubes can be arranged in Box C.

Sol Vol = L × B × H
Vol C = 15 × 9 × 10
= 1350 cm cube.

Trek to Gangotri

NOTE: Onion & Tomatoes (Fresh)

1 kg = 1000 gms

After ↓ DRYING

100 gms

Items	1 day	6 days
Rice	100 g	100 × 6 = 600 g
Whta	100 g	100 × 6 = 600 g
Dal	33 g	33 × 6 = 198 g
Gil	50 g	50 × 6 = 300 g
milk powder	40 g	40 × 6 = 240 g
Tea	10 g	10 × 6 = 60 g
Dalia	40 g	40 × 6 = 240 g
Salt	5 g	5 × 6 = 30 g
Dried Onion	10 g	10 × 6 = 60 g
Dried tomatoes	10 g	10 × 6 = 60 g

* How much of fresh tomatoes should be ~~dryed~~^{dried} for 6 days for 10 people?

Sol) Dried tomatoes needed for 6 days for 10 people.
6 × 10 × 10 = 600 gms

* What is the total weight of the food (for 6 days) in each person's bag?

Sol) ³600 gm
+ 600 gm
+ 198 gm
+ 300 gm
+ 240 gm
+ 60 gm
+ 240 gm
+ 30 gm
+ 60 gm
+ 60 gm

2388 gm

⇒ 2388 grams

HOW BIG HOW HEAVY

Ques 1) Elephant weight = 5000 kg
Blue whale weight = 35 times more than elephant. So ~~how much~~ what is the weight of Blue whale?

Sol) Weight of elephant = 5000 kg
Weight of Blue whale = 35×5000
= 175000 kg

Ques 2) Guess how many children of your weight will be equal to the weight of an elephant of 5000 kg?

Sol) ~~Child weight = 31 kg~~
SOL) ~~31 kg = 1 child weight~~

31) 5100,0 (164 161) eg ②
31
190
-186
40
-31
9

eg. If the weight of 1 child = 50 kg.
 $50 \text{ kg} + \dots = 5000 \text{ kg}$
 $50 + [7] = 5000$
[7] = 50) 500,0 (100

↑ eg one child weight = 31 kg = 7

Ques 3) At birth, a baby elephant weighs around 90 kg. How much did you weigh when you were born? Find out. How many times is a baby elephant heavier than you were at birth?

Sol) Weight of baby elephant = 90 kg
My weight at the time of birth = 3 kg
 \therefore A baby elephant was $\frac{90}{3} = 30$ times heavier than me 3 at birth.

Ques 4) If a grown up elephant eats 136 kg of food in a day then ~~it~~ it eat around _____ kg in a month?

Sol) 1 day = 136 kg
30 days = 136×30
= 4080 kg

Ques 5) Guess about ~~how~~ how much it will eat in a year.

Sol) 1 day = 136 kg
30 days = 136×30
one month = 4080 kg
12 month = $\frac{4080}{\times 12}$
1 year = 48960 kg

5

Shahid saves the Bank!

Ques*) How many coins are there in a sack of Rs 5 coins if it weights:

a) 18 kg

Sol)	1 kg = 1000 gms	Coin	grams
	18 kg = 1000 × 18	1	9
	= 18000 gms	?	18000

If 1 coin weight is 9g then the sack weighting 18000gms has 18000

	9	Coin	grams
	1	9	
=	2000 gms.	?	2000

b) 54 kg

Sol)	1 kg = 1000 gms
	54 kg = 1000 × 54
	= 54000 gms

If 1 coin weight is 9g then the sack weighting 54000 gms has

54000	=	6000 gms	coins
9			

c) 4500 kg

Sol) 1 kg = 1000 gms
4500 kg = 1000 × 4500
= 4500000 gms

If 1 coin weight is 9g then the sack weight 4500000 gms has

4500000		Coin	grams
9		1	9
?		?	4500

9g 1 coin
1g 1
9

9) 4500(500
= 45

4500g = $\frac{1}{9} \times 4500$
= 500 coins

d) 2 kg and 250g

Sol	2 kg = 2000 g	Coin	grams
	∴ 2 kg and 250g	?	2250g
	= 2000 g		

+ 250
2250

9g - 1c
1g - 1
9

$$2250 = \frac{1}{9} \times 2250 \quad \begin{array}{r} 9 \overline{) 2250} \\ \underline{18} \\ 45 \\ \underline{45} \\ \times \end{array}$$

= 250 coins

e) 1kg and 125 gms
Sol) 1kg = 1000 gms
∴ 1kg and 125 gms
= 1000 gms
+ 125 gms
1125 gms

	Coin	gms
	1	9
	?	1125g

$$9g \quad 1C \quad \begin{array}{r} 9 \overline{) 1125} \\ \underline{9} \\ 22 \\ \underline{18} \\ 45 \\ \underline{45} \\ \times \end{array}$$

= 125 coins

Ques 2) A Rs 2 coin weight = 6g.
∴ 1C = 6g
2200C = 2200 × 6
= 13200gms
∴ 13kg and 200g. Answer

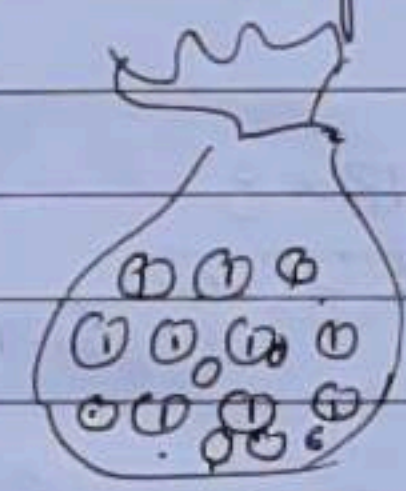
g) 3000 coins — C G
 1 6
 3000 ?

1C 6G
3000C = 3000 × 6
18000gms
∴ 18kg cms

c) 100 coin = 485g
10,000 coin = ?g
Sol) 100 coin = 485g
10,000 coins = 10000 × 485
4850000

	C	G
	100	485
	10,000	?

c) 100 one Rupee coins wt = 485gms



= 100 coins of Rs 1
= weight - 485gms

Weight of 10000 coins = ?
100 coins wt = 485
1 coin wt = $\frac{485}{100}$ gm

10,000 coin wt = $\frac{485 \times 10000}{100}$

Also, 4850 kg = 4850000 gm

WORKSHEET

Multiplying decimals by 10, 100 & 1000.

1 $L \times B \times H$
 $2 \times 2 \times 7$
 28 cm^3

$2 \times B \times H$
 $7 \times 12 \times 2 = 168 \text{ cm}^3$

$L \times B \times H$
 $1 \times 1 \times 8$
 8 cm^3

$L \times B \times H$
 $8 \times 8 \times 8$
 512 cm^3

$L \times B \times H$
 $2 \times 2 \times 6$
 24 cm^3

$L \times B \times H$
 $2 \times 6 \times 2$
 24 cm^3

$L \times B \times H$
 $5 \times 18 \times 25$
 1890 cm^3

$L \times B \times H$
 $5 \times 14 \times 25$
 1750

$L \times B \times H$
 $6 \times 18 \times 8$
 864 cm^3

$3 \times 9 \times 12$
 324

$2 \times 2 \times 2$
 8 cm^3

$5 \times 13 \times 9$
 585 cm^3

$21 \times 21 \times 21$
 9261 cm^3

$7 \times 7 \times 7$
 343 cm^3

① $35.3 \times 10 = 353$
 Sol 35.3
 $= 353 \times \frac{10}{10} = 353 \times 1$
 $\frac{10}{10} \downarrow = 353$

have
 ② $4.37 \times 100 = 437$
 Sol 4.37
 $= 437 \times \frac{100}{100} = 437 \times 1$
 $\frac{100}{100} \downarrow = 437$

③ $73.3 \times 1000 =$
 Sol 73.3
 $= 733 \times \frac{1000}{1000} = 733 \times 1000$
 $\frac{1000}{1000} \downarrow = 73300$

④ $56.8 \times 10 =$
 Sol 56.8
 $= 568 \times \frac{10}{10} = 568 \times 1$
 $\frac{10}{10} \downarrow = 568$

⑤ $1.3 \times 10 =$

Sol 1.3

$= \frac{13 \times 10}{10} = \frac{13 \times 1}{1} = 13$

$93.6 \times 100 =$

Sol 93.6

$= \frac{936 \times 100}{100} = \frac{936 \times 10}{1} = 9360$

$4.57 \times 100 =$

Sol 4.57

$= \frac{457 \times 100}{100} = \frac{457 \times 1}{1} = 457$

$5.537 \times 1000 =$

Sol 5.537

$= \frac{5537 \times 1000}{1000} = \frac{5537 \times 10}{1} = 55370$

$83.45 \times 1000 =$

Sol 83.45

$= \frac{8345 \times 1000}{1000} = \frac{8345 \times 10}{1} = 83450$

76.9×10

Sol 76.9

$= \frac{769 \times 10}{10} = \frac{769 \times 1}{1} = 769$

7.23×100

Sol 7.23

$= \frac{723 \times 100}{100} = \frac{723 \times 1}{1} = 723$

4.27×100

Sol 4.27

$= \frac{427 \times 100}{100} = \frac{427 \times 1}{1} = 427$

18.54×10

Sol 18.54

$= \frac{1854 \times 10}{10} = 1854, (185.4)$
 $\frac{1854}{10}$
 $\begin{array}{r} 1854 \\ - 1800 \\ \hline 54 \\ - 50 \\ \hline 40 \\ \frac{40}{10} \\ \hline 4 \end{array}$

$$6.45 \times 100$$

Sol) 6.45
 $= \frac{645}{100} \times \frac{100}{1} = 645$

$$4.23 \times 100$$

Sol) 4.23
 $= \frac{423}{100} \times \frac{100}{1} = 423$

$$84.2 \times 10$$

Sol) 84.2
 $= \frac{842}{10} \times \frac{10}{1} = 842$

$$3.86 \times 1000$$

Sol) 3.86
 $= \frac{386}{100} \times \frac{1000}{1} = 3860$

$$3.64 \times 100$$

Sol) 3.64
 $= \frac{364}{100} \times \frac{100}{1} = 364$

$$4.82 \times 100$$

Sol) 4.82
 $= \frac{482}{100} \times \frac{100}{1} = 482$

$$31.2 \times 100$$

Sol) 31.2
 $= \frac{312}{10} \times \frac{100}{1} = 3120$

WORKSHEET

Ques 1) Multiply & divide by 10. Sheet 1
(UP to 100)

A) Multiply these numbers by 10.

1) $0.4 \times 10 = 4$

Sol) $0.4 = \frac{4}{10} \times \frac{10}{1} = 4 \times 1 = 4$ Ans.

2) $1.9 \times 10 = 19$

Sol) $1.9 = \frac{19}{10} \times \frac{10}{1} = 19 \times 1 = 19$

3) $10 \times 28 = 280$

Sol

$$\begin{array}{r} 28 \\ \times 10 \\ \hline 280 \end{array}$$

4) $1.2 \times 10 = 12$

Sol) $1.2 = \frac{12}{10} \times \frac{10}{1} = 12 \times 1 = 12$

5) $13.5 \times 10 = 135$

Sol) $13.5 = \frac{135}{10} \times \frac{10}{1} = 135 \times 1 = 135$

6) $25.7 \times 10 = 257$

Sol) $25.7 = \frac{257}{10} \times \frac{10}{1} = 257 \times 1 = 257$

7) $10 \times 16 = 160$

Sol)

$$\begin{array}{r} 16 \\ \times 10 \\ \hline 160 \end{array}$$

8) $0.9 \times 10 = 9$

Sol) $0.9 = \frac{9}{10} \times \frac{10}{1} = 9 \times 1 = 9$

9) $46.8 \times 10 = 468$

Sol) $46.8 = \frac{468}{10} \times \frac{10}{1} = 468 \times 1 = 468$

B) Divide these numbers by 10.

10) $12 \div 10 = 1.2$, $220 \div 10 = 22$, $630 \div 10 = 63$

$$\begin{array}{r} 12 \\ -10 \\ \hline 20 \\ -20 \\ \hline 0 \end{array}$$

$$\begin{array}{r} 220 \\ -20 \\ \hline 20 \\ -20 \\ \hline 0 \end{array}$$

$$\begin{array}{r} 630 \\ -60 \\ \hline 30 \\ -30 \\ \hline 0 \end{array}$$

bigger \times
smaller \div

$$\begin{array}{r}
 10 \overline{) 90} (9 \\
 \underline{-90} \\
 \times
 \end{array}
 \quad
 \begin{array}{r}
 10 \overline{) 900} (90 \\
 \underline{-90} \\
 00 \\
 \underline{-00} \\
 \times
 \end{array}
 \quad
 \begin{array}{r}
 10 \overline{) 500} (50 \\
 \underline{-50} \\
 00 \\
 \underline{-00} \\
 \times
 \end{array}$$

$$\begin{array}{r}
 10 \overline{) 48} (4.8 \\
 \underline{-48} \\
 \times
 \end{array}
 \quad
 \begin{array}{r}
 10 \overline{) 181} (18.1 \\
 \underline{-10} \\
 81 \\
 \underline{-80} \\
 10 \\
 \underline{10} \\
 \frac{1}{1}
 \end{array}
 \quad
 \begin{array}{r}
 10 \overline{) 143} (14.3 \\
 \underline{-10} \\
 43 \\
 \underline{-40} \\
 30 \\
 \underline{30} \\
 \frac{3}{1}
 \end{array}$$

c) Ten times bigger or smaller. Fill in the missing numbers.

1) 70 is 10^{\times} bigger than 7

2) 0.8 is 10^{\times} smaller than 8

3) 740 is 10^{\times} bigger than 74

5) 5.2 is 10^{\times} smaller than 52

6) 12 is 10^{\times} smaller than 120

7) 37 is 10^{\times} bigger than 3.7

(times)
8) 142 is 10^{\times} bigger than 14.2

(times)
9) 9.8 is 10^{\times} smaller than 98

d) Multiply or divide these numbers by 10

1) 3.5×10
 $3.5 = \frac{35}{10} \times 10 = 35 \times 1 = 35$

2) $16 \div 10$ 3) $452 \times 10 = 4520$

Sol) $10 \overline{) 16} (1$ $\begin{array}{r} 452 \\ \times 10 \\ \hline 4520 \end{array}$

$$\begin{array}{r}
 10 \overline{) 172} (17.2 \\
 \underline{-10} \\
 72 \\
 \underline{-70} \\
 20 \\
 \underline{20} \\
 \frac{2}{1}
 \end{array}
 \quad
 \begin{array}{r}
 10 \overline{) 635} (63.5 \\
 \underline{-60} \\
 35 \\
 \underline{-30} \\
 50 \\
 \underline{50} \\
 \frac{5}{1}
 \end{array}
 \quad
 \begin{array}{r}
 10 \overline{) 180} (18 \\
 \underline{-10} \\
 80 \\
 \underline{-80} \\
 \times
 \end{array}$$

1) 10.6×10
 $= 106$
 $0.6 = \frac{6}{10} \times 10 = 6 \times 1 = 6$

$$3.2 \times 10$$

Sol) $3.2 = \frac{32}{10} \times \frac{10}{1} = 32 \times 1 = 32$

$$64.8 \times 10$$

Sol) $64.8 = \frac{648}{10} \times \frac{10}{1} = 648 \times 1 = 648$

$$10 \overline{) 140} \quad 14$$

$$= 34.8 \times 10 = 348 \times \frac{10}{1}$$

$$\begin{array}{r} 10 \\ -10 \\ \hline 40 \\ -40 \\ \hline 0 \end{array} \quad = 348 \times 1 = 348$$

$$\begin{array}{r} 10 \overline{) 39} \quad 3.9 \\ -30 \\ \hline 90 \\ -90 \\ \hline 0 \end{array} \quad \begin{array}{r} 10 \overline{) 527} \quad 52.7 \\ -50 \\ \hline 27 \\ -20 \\ \hline 70 \end{array}$$

$$21.8 \times 10$$

Sol) $21.8 = \frac{218}{10} \times \frac{10}{1} = 218 \times 1 = 218$

$$6.2 \times 10$$

Sol) $6.2 = \frac{62}{10} \times \frac{10}{1} = 62 \times 1 = 62$