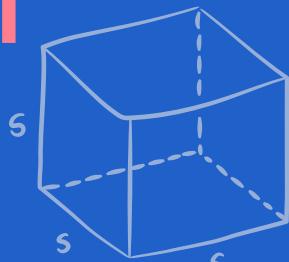


Mathematics



$$V = s^3$$



Level

5



3 1
5 8





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11 **PATTERNING**

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11.1. Patterns (types)

11.2. Pattern rule

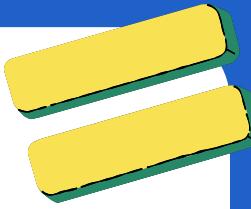
12.1. Read and write the amount

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Chapter 1

WHOLE NUMBER



1.1. Place Value Chart

Millions	Hundred Thousands	Ten Thousand	Thousand	Hundreds	Tens	Once
8	4	6	3	2	9	7

Number = 8,463,297

In Words = Eight million four hundred sixty three thousand two hundred ninety seven

Place Value of the Circled digit = 400,000

In Words = Four hundred thousand

Expanded Format

$$8,000,000 + 400,000 + 60,000 + 3000 + 200 + 90 + 7$$





1.2. Understanding Place Value

Que 1. Write the following numbers in word.

a. 9,832,746

b. 4,085,397

c. 7,456,670

d. 4,085,397

e. 5,921,048



Que 2. Write the place value of the underlined digit:

Eg: $2,834,975$ = 3 is in the ten thousand place
or
numerical value: 30,000

a. **895,632**

8 is in the _____ place

numerical value: _____

b. **4,567,890**

6 is in the _____ place

numerical value: _____

c. **1,897,654**

1 is in the _____ place

numerical value: _____

d. **5,321,809**

3 is in the _____ place

numerical value: _____

e. **2,983,045**

0 is in the _____ place

numerical value: _____

f. **1,234,567**

3 is in the _____ place

numerical value: _____



g. 7,341,259

3 is in the _____ place

numerical value: _____

h. 5,982,431

8 is in the _____ place

numerical value: _____

i. 1,276,540

7 is in the _____ place

numerical value: _____

j. 9,123,845

2 is in the _____ place

numerical value: _____

k. 6,854,732

5 is in the _____ place

numerical value: _____

l. 8,320,754

0 is in the _____ place

numerical value: _____

m. 1,739,564

3 is in the _____ place

numerical value: _____



Que 3. Write the following in the expanded form:

Eg: 9,643,274

Expanded Form:

$$9,000,000 + 600,000 + 40,000 + 3,000 + 200 + 70 + 4$$

a. 9,643,274

Expanded Form:

b. 6,780,432

Expanded Form:

c. 2,564,781

Expanded Form:

d. 9,348,157

Expanded Form:

e. 3,927,143

Expanded Form:



Que 4. Put >, < or = in the box provided:

a) 6,498,325 6,948,235

b) 593,045 1,560,450

c) 7,853,294 6,213,294

d) 1,687,432 1,687,432

e) 9,876,543 9,789,543

Que 5. Put the following numbers in ascending order(least to greatest):

a) 3,258,945 / 6,005,327 / 58,652 / 143,268

b) 9,874,052 / 9,987,654 / 970,005 / 20,005

c) 688,479 / 1,982,746 / 2,200 / 53 / 1987

Que 6. Put the following numbers in descending order(greatest to least):

a) 5,363,246 / 9,543,600 / 345,362 / 2,005 / 1,524,032

b) 8,761,079 / 932,674 / 9,938,400 / 832,694

c) 4,329,874 / 6,875,432 / 90,532 / 995,326



1.3. Addition and Subtraction

ADDITION

a) 9873
 +149

b) 6325
 +1938

c) 4293
 +4287

d) 8204
 +1597

e) 3508
 +1968

f) 4326
 +829

g) 8365
 +1056

h) 2438
 +1780

i) 4326
 +1041

j) 9836
 +428

k) 1234
 +2341

l) 8525
 +475



SUBTRACT

a) 9874
 — 2532

b) 8765
 — 5093

c) 7698
 — 1889

d) 6905
 — 4397

e) 6847
 — 2847

f) 1642
 — 1619

g) 2836
 — 1009

h) 9087
 — 5329

i) 8768
 — 5328

j) 5389
 — 1204

k) 4389
 — 2386

l) 9000
 — 8999

1.4. Multiplying the whole numbers

How to multiply

32 × 46

Example

$$\begin{array}{r}
 32 \\
 \times 46 \\
 \hline
 192 \\
 +1280 \\
 \hline
 1472
 \end{array}$$

Ans= 1,472

Multiply Right to Left

$$\begin{array}{r}
 32 \\
 \times 6 \\
 \hline
 192
 \end{array}$$

then

$$\begin{array}{r}
 32 \\
 \times 40 \\
 \hline
 1280
 \end{array}$$

Multiply the following

a) 79 $\underline{\times 32}$

b) 64 $\underline{\times 53}$

c) 28 $\underline{\times 74}$



d) 67 e) 46 f) 83

$$\begin{array}{r} \times 52 \\ \hline \end{array}$$
$$\begin{array}{r} \times 29 \\ \hline \end{array}$$
$$\begin{array}{r} \times 17 \\ \hline \end{array}$$

g) 56 h) 193 i) 432

$$\begin{array}{r} \times 38 \\ \hline \end{array}$$
$$\begin{array}{r} \times 24 \\ \hline \end{array}$$
$$\begin{array}{r} \times 57 \\ \hline \end{array}$$

j) 745 k) 264 l) 149

$$\begin{array}{r} \times 83 \\ \hline \end{array}$$
$$\begin{array}{r} \times 91 \\ \hline \end{array}$$
$$\begin{array}{r} \times 35 \\ \hline \end{array}$$

m) 348 n) 634 o) 827

$$\begin{array}{r} \times 44 \\ \hline \end{array}$$
$$\begin{array}{r} \times 57 \\ \hline \end{array}$$
$$\begin{array}{r} \times 69 \\ \hline \end{array}$$



p)
$$\begin{array}{r} 3241 \\ \times 8 \\ \hline \end{array}$$

q)
$$\begin{array}{r} 8297 \\ \times 69 \\ \hline \end{array}$$

r)
$$\begin{array}{r} 6549 \\ \times 7 \\ \hline \end{array}$$

1.5. Dividing the whole numbers

How to divide: $263 \div 14$

$$\begin{array}{r}
 18 \text{ } R11 \\
 \hline
 14 \overline{)263} \\
 -14 \\
 \hline
 123 \\
 -112 \\
 \hline
 11
 \end{array}$$

Annotations:

- A blue bracket under the 263 is labeled $14 \times 1 = 14$.
- A purple bracket under the 123 is labeled $14 \times 8 = 112$.

Ans= 18 R11

The quotient is 18
The remainder is 11



Que 1. Divide the following:

a) $\underline{11} \overline{)125}$

b) $\underline{15} \overline{)634}$

c) $\underline{15} \overline{)175}$

d) $\underline{51} \overline{)385}$

e) $\underline{47} \overline{)719}$

f) $\underline{18} \overline{)264}$

g) $\underline{48} \overline{)7246}$

h) $\underline{88} \overline{)4773}$

i) $\underline{23} \overline{)5173}$

j) $\underline{89} \overline{)4340}$

k) $\underline{56} \overline{)2829}$

l) $\underline{31} \overline{)6263}$

m) $\underline{62} \overline{)3628}$

n) $\underline{42} \overline{)6571}$

o) $\underline{31} \overline{)7798}$



Chapter 2

DECIMALS

2.1 Understanding place value in decimals

Thousand	Hundreds	Tens	Once	.	tenths	hundredths	thousandths
3	2	6	5	.	4	8	7

A red circle surrounds the decimal point (.). A red arrow points downwards from the decimal point to the word "Decimal" located below it.

Number= 3,265.487

Place value of:

4 = four-tenths or $\frac{4}{10}$ or 0.4

8 = eight hundredths or $\frac{8}{100}$ or 0.08

7 = seven thousandths or $\frac{7}{1000}$ or 0.007

Que 1. Write the place value of:

a) 4 in 24.365 = _____

b) 7 in 732.486 = _____

c) 6 in 48.364 = _____

d) 5 in 12.345 = _____



e) 1 in 487.193 = _____

f) 9 in 694.25 = _____

Que 2. Write the digit that is in the given place value:

a) 64.283 (tens) = _____

b) 456.294 (hundreds) = _____

c) 987.654 (hundredths) = _____

d) 145.328(tenths) = _____

e) 648.210 (ones) = _____

f) 754.653 (thousandths) = _____

g) 4369.284 (thousands) = _____



2.2. Adding Decimals

How to Add

$$\begin{array}{r} \textcircled{1} \quad \textcircled{1} \\ 136.25 \\ + 453.82 \\ \hline 590.07 \end{array}$$

Add the following

a) 6.3

$$\begin{array}{r} \\ +1.4 \\ \hline \end{array}$$

b) 8.4

$$\begin{array}{r} \\ +1.9 \\ \hline \end{array}$$

c) 23.5

$$\begin{array}{r} \\ +18.6 \\ \hline \end{array}$$

d) 56.2

$$\begin{array}{r} \\ +29.9 \\ \hline \end{array}$$

e) 684.29

$$\begin{array}{r} \\ +158.93 \\ \hline \end{array}$$

f) 437.24

$$\begin{array}{r} \\ +183.98 \\ \hline \end{array}$$

g) 168.20 $\begin{array}{r} 168.20 \\ +437.99 \\ \hline \end{array}$

h) 999.38 $\begin{array}{r} 999.38 \\ +42.19 \\ \hline \end{array}$

i) 68.32 $\begin{array}{r} 68.32 \\ +28.32 \\ \hline \end{array}$

j) 0.32 $\begin{array}{r} 0.32 \\ 1.32 \\ +2.83 \\ \hline \end{array}$

k) 29.32 $\begin{array}{r} 29.32 \\ 10.52 \\ +10.25 \\ \hline \end{array}$

l) 0.43 $\begin{array}{r} 0.43 \\ 0.97 \\ +0.58 \\ \hline \end{array}$

m) 11.48 $\begin{array}{r} 11.48 \\ 12.97 \\ +21.32 \\ \hline \end{array}$

n) 486.25 $\begin{array}{r} 486.25 \\ +103.78 \\ \hline \end{array}$

o) 687.39 $\begin{array}{r} 687.39 \\ +105.52 \\ \hline \end{array}$



2.3. Subtracting Decimals

How to Subtract

Step 1. Align decimal points

$$\begin{array}{r} \overset{8}{\cancel{4}} \cancel{5} 9 \cancel{.} \overset{1}{8} \\ - 136.9 \\ \hline 322.9 \end{array}$$

Step 2.

Now subtract like a whole number

The difference is 322.9

Que 1. Subtract the following:

a) 98.4
 $\underline{-5.3}$

b) 27.3
 $\underline{-14.5}$

c) 96.4
 $\underline{-48.9}$

d) 68.32
 $\underline{-14.5}$

e) 13.28
 $\underline{-12.94}$

f) 66.87
 $\underline{-32.98}$



g) 129.83

$$\begin{array}{r} 129.83 \\ - 49.82 \\ \hline \end{array}$$

h) 735.28

$$\begin{array}{r} 735.28 \\ - 32.98 \\ \hline \end{array}$$

i) 283.56

$$\begin{array}{r} 283.56 \\ - 49.82 \\ \hline \end{array}$$

j) 129.99

$$\begin{array}{r} 129.99 \\ - 29.99 \\ \hline \end{array}$$

k) 832.54

$$\begin{array}{r} 832.54 \\ - 93.45 \\ \hline \end{array}$$

l) 983.15

$$\begin{array}{r} 983.15 \\ - 732.25 \\ \hline \end{array}$$

2.4. Inserting zeros to Add or Subtract

E.g.: How to add: $15.3 + 12.52 + 10.68$

Step 1 Align with decimal point.

$$\begin{array}{r}
 15.30 \\
 12.52 \\
 +10.68 \\
 \hline
 38.50
 \end{array}$$

Ans: 38.50

Step 2. put zero '0'

Step 3. Add Normally

E.g.: How to subtract: $93.5 - 14.34$

Step 1 Align with decimal point.

$$\begin{array}{r}
 8\ 1\ 4\ 1 \\
 93.50 \\
 -14.35 \\
 \hline
 79.16
 \end{array}$$

Ans: 79.16

Step 2. put zero '0'

Step 3. Subtract Normally



Que1. Add or Subtract

a) 6.4 $\begin{array}{r} + 0.23 \\ \hline \end{array}$

b) 0.84 $\begin{array}{r} + 1.1 \\ \hline \end{array}$

c) 63.2 $\begin{array}{r} + 4.52 \\ \hline \end{array}$

d) 3.98 $\begin{array}{r} + 4.5 \\ \hline \end{array}$

e) 98.1 $\begin{array}{r} + 5.25 \\ \hline \end{array}$

f) 64.3 $\begin{array}{r} + 14.58 \\ \hline \end{array}$

g) 8.5 $\begin{array}{r} - 4.32 \\ \hline \end{array}$

h) 6.4 $\begin{array}{r} - 1.87 \\ \hline \end{array}$

i) 9.78 $\begin{array}{r} - 4.3 \\ \hline \end{array}$

j) 18.5 $\begin{array}{r} - 2.54 \\ \hline \end{array}$

k) 76. $\begin{array}{r} - 8.9 \\ \hline \end{array}$

l) 11.6 $\begin{array}{r} - 10.85 \\ \hline \end{array}$

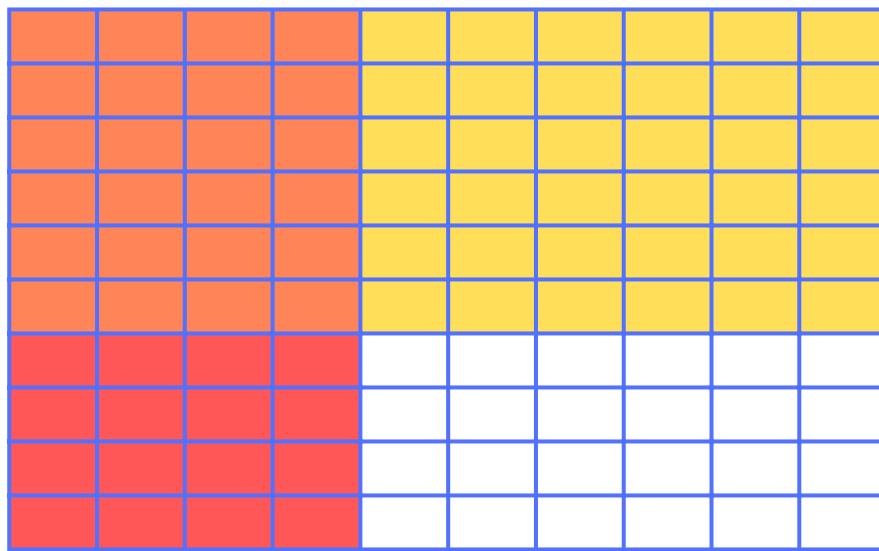
m) 0.5
 2.53
 $\begin{array}{r} + 4.29 \\ \hline \end{array}$

n) 8.2
 1.75
 $\begin{array}{r} + 2.38 \\ \hline \end{array}$

o) 11.5
 20.36
 $\begin{array}{r} + 19.2 \\ \hline \end{array}$

2.5. Multiplication of decimal (using models)

Eg.



$$0.4 \times 0.6 = 0.24$$



Red



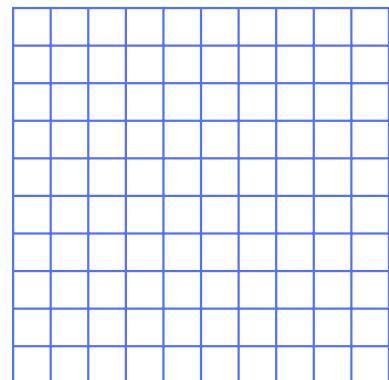
Yellow



Orange(Answer)

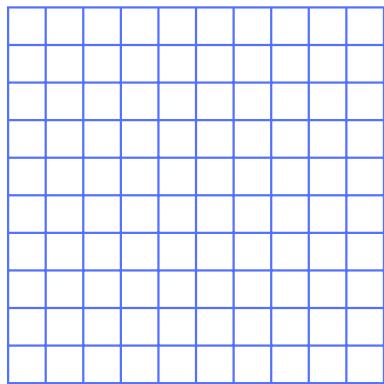
Que 1. Find the product using models:

a) $0.3 \times 0.2 =$ _____

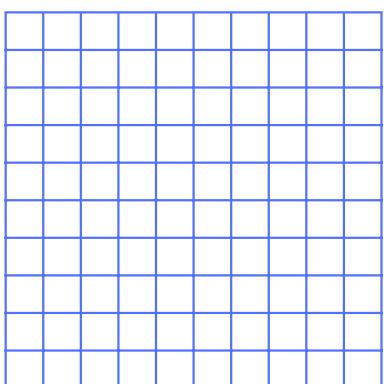




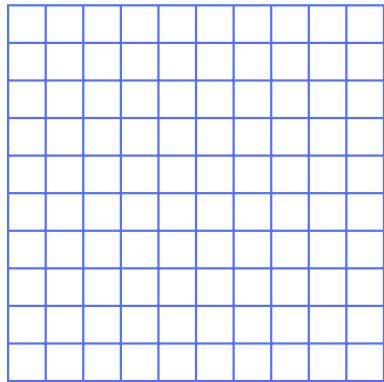
b) $0.8 \times 0.4 =$ _____



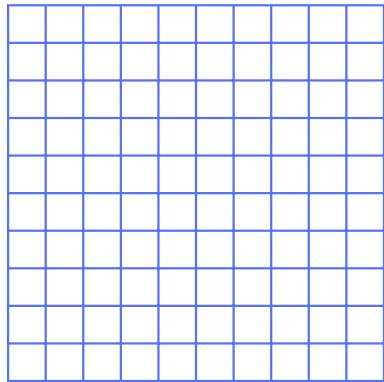
c) $0.5 \times 0.7 =$ _____



d) $0.9 \times 0.3 =$ _____



e) $0.3 \times 0.5 =$ _____



2.6. Find the product using rules

How to multiply

Eg:

★
$$\begin{array}{r} 0.4 \\ \times 3 \\ \hline 1.2 \end{array}$$

count the decimal place (decimal place= 1)

★
$$\begin{array}{r} 0.4 \\ \times 0.3 \\ \hline 0.12 \end{array}$$

2 decimal places

★
$$\begin{array}{r} 0.04 \\ \times 0.03 \\ \hline 0.0012 \end{array}$$

4 decimal places

Que 1. Multiply and find the product of the following:

a) 1.4
 $\times 5$

b) 0.83
 $\times 4$

c) 3.74
 $\times 0.28$

d) 7.39
 $\times 0.4$

e) 82.6
 $\times 5.7$

f) 29.73
 $\times 8.21$

g) 0.45
 $\times 0.23$

h) 9.45
 $\times 1.23$

i) 2.8
 $\times 7.39$

j) 9.35
 $\times 8.24$

k) 5.4
 $\times 8$

l) 6.5
 $\times 2.1$

2.7. Multiply decimals by 10, 100 or 1000

MR



Move decimal to Right



Multiplication

Eg.

★ 8.3×10



One Zero

Move decimal one place
to right



8 . 3 0

Ans= 83.0

★ 8.3×100



Two Zeros

(Multiplication Sign)



Move decimal two places
to the right



8 . 3 0 0 0 0

Ans= 830.0

★ 8.3×1000



Three Zeros



Move decimal three
places to the right



8 . 3 0 0 0 0

Ans= 8,300.0



Que 1. Multiply:

a) $0.35 \times 10 =$ _____

b) $6.45 \times 100 =$ _____

c) $1.7 \times 100 =$ _____

d) $9.873 \times 1000 =$ _____

e) $14.25 \times 10 =$ _____

f) $687.39 \times 1000 =$ _____

g) $14.295 \times 100 =$ _____

h) $9.834 \times 10 =$ _____

i) $2.08 \times 1000 =$ _____

j) $7.509 \times 1000 =$ _____

k) $17.483 \times 1000 =$ _____

l) $9.8 \times 100 =$ _____

m) $2.43 \times 10 =$ _____

n) $148.836 \times 1000 =$ _____

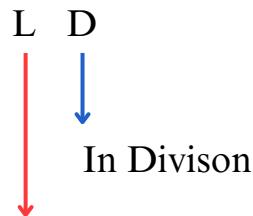
o) $6.932 \times 100 =$ _____

p) $0.8 \times 100 =$ _____

q) $1.501 \times 10 =$ _____

r) $256.125 \times 100 =$ _____

2.8. Dividing Decimals by 10, 100 or 1000



Eg.

$$9.6 \div 10 \longrightarrow \text{One Zero}$$

↓

move decimal one place in left direction

Ans $\text{Ans } 9.6 \div 10 = 0.96$

$$9.6 \div 100 \longrightarrow \text{Two Zero}$$

↓

move decimal two place in left direction

Ans $\text{Ans } 9.6 \div 100 = 0.096$

$$009.6 \div 1000 \longrightarrow \text{Three Zero}$$

↓

move decimal three place in left direction

Ans $\text{Ans } 9.6 \div 1000 = 0.0096$



Que 1. Divide:

a) $2.7 \div 10 =$ _____

b) $18.4 \div 100 =$ _____

c) $98.3 \div 1000 =$ _____

d) $8.9 \div 100 =$ _____

e) $143 \div 10 =$ _____

f) $429.8 \div 1000 =$ _____

g) $12.4 \div 100 =$ _____

h) $18.45 \div 10 =$ _____

i) $9.8 \div 1000 =$ _____

j) $6.45 \div 100 =$ _____

k) $7.4 \div 10 =$ _____

l) $15.4 \div 100 =$ _____

m) $16 \div 1000 =$ _____

n) $1.9 \div 100 =$ _____

o) $5.428 \div 10 =$ _____

p) $0.8 \div 100 =$ _____

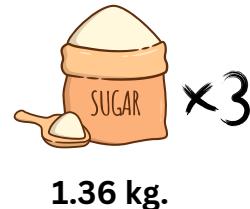
q) $1.501 \div 10 =$ _____

r) $256.125 \div 100 =$ _____

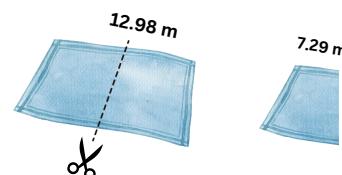
2.9. Problem Solving



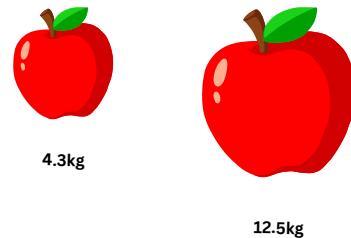
Que1. A sugar bag weighs 1.36 kg. what is the total weight of three such bags?



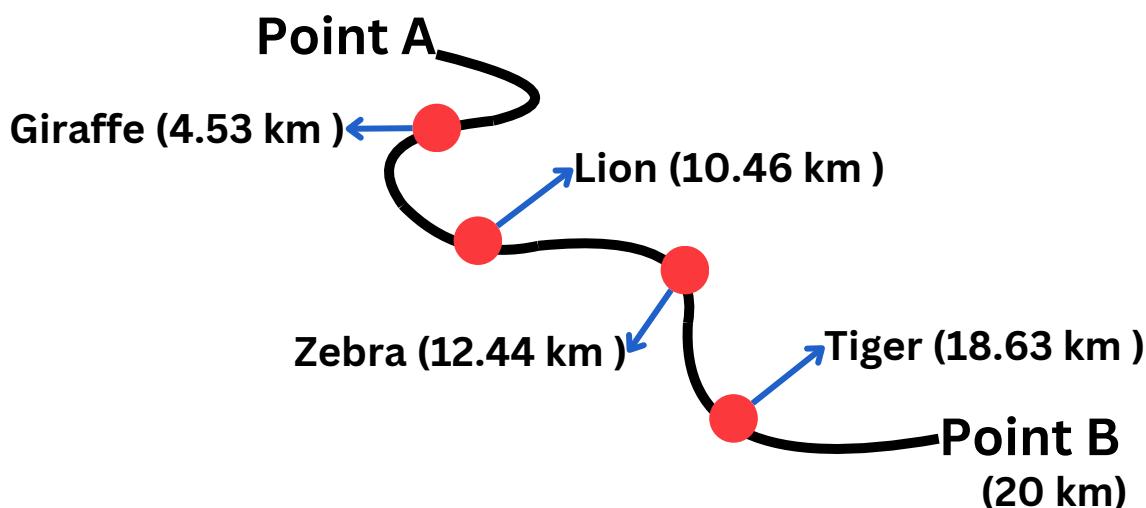
Que2. John has a cloth that is 12.98 m long and he cuts it into two pieces. if one piece is 7.29 m long, how long is the other piece?



Que3. What is the total weight of these two apples?



Que4. In a zoo





How far is :

a) The Giraffe from Lion?

_____ Km.

b) The zebra from Point A?

_____ Km.

c) Lion from Tiger?

_____ Km.

d) Tiger from Point B?

_____ Km.



2.10. Expanded Form with Decimal

Eg.

$$\cdot 29,834.671 = 20,000 + 9,000 + 800 + 30 + 4 + \frac{6}{10} + \frac{7}{100} + \frac{1}{1000}$$

or

$$\cdot 29,834.671 = 20,000 + 9,000 + 800 + 30 + 4 + 0.6 + 0.07 + 0.001$$

Que1. Write the following in expanded form.

a) 687.29

b) 3845.193

c) 1451.085

d) 987.432

e) 38,966.4

f) 2,874.63

g) 100.46

h) 9,899.354



i) 1,987.65

j) 204.204

k) 874.32

l) 1,987.78

2.11. Comparing Decimals

which is smaller: 8.432 or 8.490

Here

The ones digit is same (i.e. 8)

The tenths digit is same (i.e. 4)

the hundredths digit is different (i.e. 3 is smaller than 9)

Therefore, 8.432 is smaller than 8.490

$$\Rightarrow 8.432 < 8.490$$

Que 1. Compare the following using <, > or =.

a) 9.326	<input type="text"/>	8.436	i) 9.326	<input type="text"/>	8.436
b) 0.010	<input type="text"/>	0.001	j) 0.010	<input type="text"/>	0.001
c) 0.53	<input type="text"/>	0.530	k) 0.53	<input type="text"/>	0.530
d) 1.987	<input type="text"/>	1.978	l) 1.987	<input type="text"/>	1.978
e) 200.3	<input type="text"/>	200.5	m) 200.3	<input type="text"/>	200.5
f) 91.43	<input type="text"/>	89.99	n) 91.43	<input type="text"/>	89.99
g) 85.224	<input type="text"/>	85.422	o) 85.224	<input type="text"/>	85.422
h) 18.220	<input type="text"/>	18.202	p) 18.220	<input type="text"/>	18.202



2.12. Ordering Decimals

Que1. Order the decimals from greatest to least to greatest.

- a) 6.421, 5.884, 19.325, 2.384

$$\underline{\hspace{1cm}} < \underline{\hspace{1cm}} < \underline{\hspace{1cm}} < \underline{\hspace{1cm}}$$

- b) 29.97, 98.4, 33.333, 87.87

$$\underline{\hspace{1cm}} < \underline{\hspace{1cm}} < \underline{\hspace{1cm}} < \underline{\hspace{1cm}}$$

- c) 32.5, 32.97, 32.8, 32.904

$$\underline{\hspace{1cm}} < \underline{\hspace{1cm}} < \underline{\hspace{1cm}} < \underline{\hspace{1cm}}$$

- d) 0.113, 0.287, 0.4, 0.03

$$\underline{\hspace{1cm}} < \underline{\hspace{1cm}} < \underline{\hspace{1cm}} < \underline{\hspace{1cm}}$$

- e) 0.035, 0.03, 0.503, 0.005

$$\underline{\hspace{1cm}} < \underline{\hspace{1cm}} < \underline{\hspace{1cm}} < \underline{\hspace{1cm}}$$

- f) 8.32, 8.398, 8.464, 8.8

$$\underline{\hspace{1cm}} < \underline{\hspace{1cm}} < \underline{\hspace{1cm}} < \underline{\hspace{1cm}}$$

- g) 3.19, 3.09, 3.9, 3.99

$$\underline{\hspace{1cm}} < \underline{\hspace{1cm}} < \underline{\hspace{1cm}} < \underline{\hspace{1cm}}$$

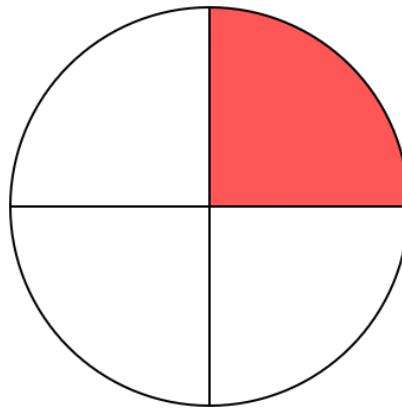
Chapter 3

FRACTIONS

3.1. How fraction is written. (Introduction:- Numerator and denominator)

The fraction contains a numerator (the number written above the line) and a denominator (the number written below the line)

Example



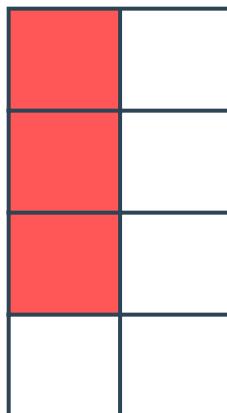
The fraction of the shaded part is $\frac{1}{4}$

Where 1 is the numerator

and

4 is the denominator

Try it



= _____

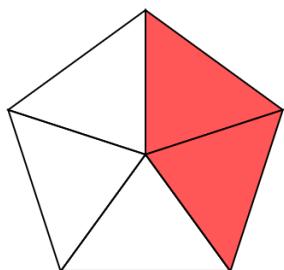
Try it



= _____

Que1. Write the fraction for each of the following asked parts:

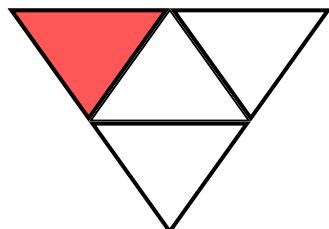
a)



Shaded part = _____

Unshaded part = _____

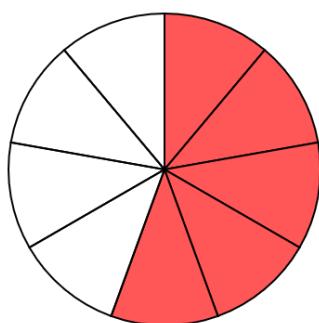
b)



Shaded part = _____

Unshaded part = _____

c)



Shaded part = _____

Unshaded part = _____

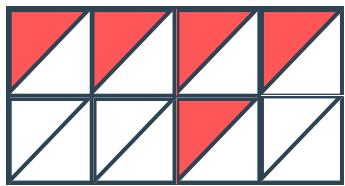
d)



Shaded part = _____

Unshaded part = _____

e)



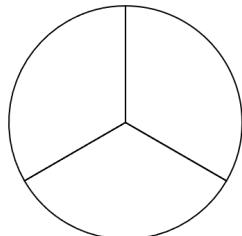
Shaded part = _____

Unshaded part = _____

3.2. Introduction for Numerators, denominators and using diagrams.

Colour the following a fraction is indicated:

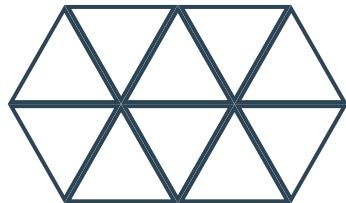
a)



$$\text{Red} = \frac{1}{3}$$

$$\text{Blue} = \frac{2}{3}$$

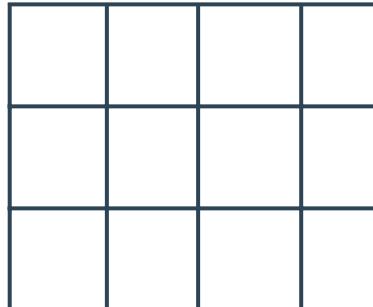
b)



$$\text{yellow} = \frac{6}{10}$$

$$\text{green} = \frac{4}{10}$$

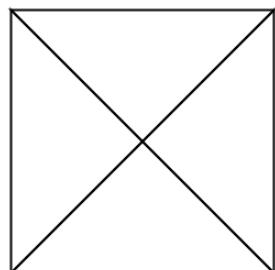
c)



$$\text{red} = \frac{5}{12}$$

$$\text{green} = \frac{7}{12}$$

d)



$$\text{blue} = \frac{1}{4}$$

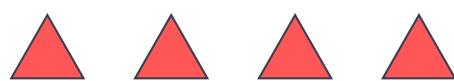
$$\text{pink} = \frac{3}{4}$$

Que3. Complete the fractions using the given denominator.

a)



$$\text{shaded} = \frac{\underline{\hspace{1cm}}}{4}$$



$$\text{unshaded} = \frac{\underline{\hspace{1cm}}}{4}$$



b)



$$\text{shaded} = \frac{\underline{\hspace{1cm}}}{6}$$



$$\text{unshaded} = \frac{\underline{\hspace{1cm}}}{6}$$



c)

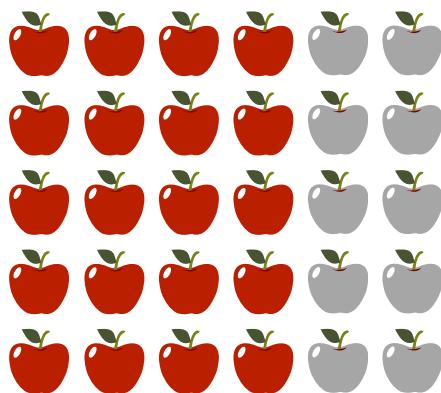


$$\text{shaded} = \frac{\underline{\hspace{1cm}}}{5}$$



$$\text{unshaded} = \frac{\underline{\hspace{1cm}}}{5}$$

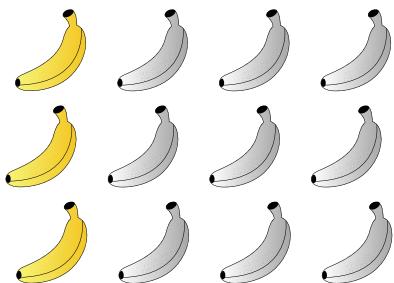
d)



$$\text{shaded} = \frac{\underline{\hspace{1cm}}}{3}$$

$$\text{unshaded} = \frac{\underline{\hspace{1cm}}}{3}$$

e)

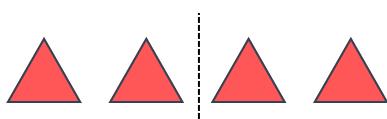


$$\text{shaded} = \frac{\underline{\hspace{1cm}}}{4}$$

$$\text{unshaded} = \frac{\underline{\hspace{1cm}}}{4}$$

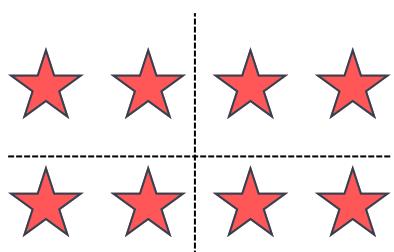
Que4. Use the pictures to find the answer:

a)



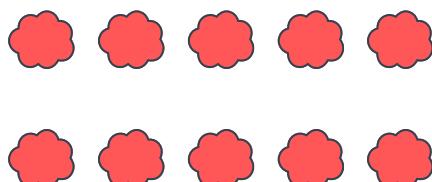
$$\frac{1}{2} \text{ of } 4 = \underline{\hspace{1cm}}$$

b)



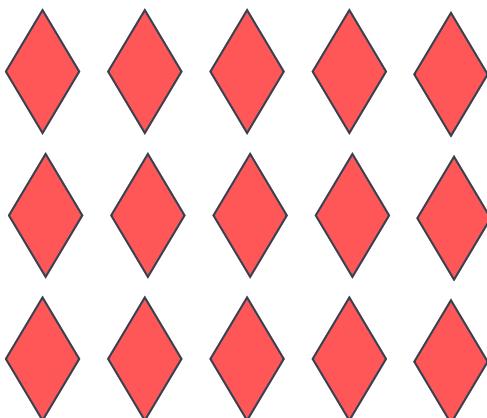
$$\frac{1}{4} \text{ of } 8 = \underline{\hspace{1cm}}$$

c)



$$\frac{1}{5} \text{ of } 10 = \underline{\hspace{1cm}}$$

d)



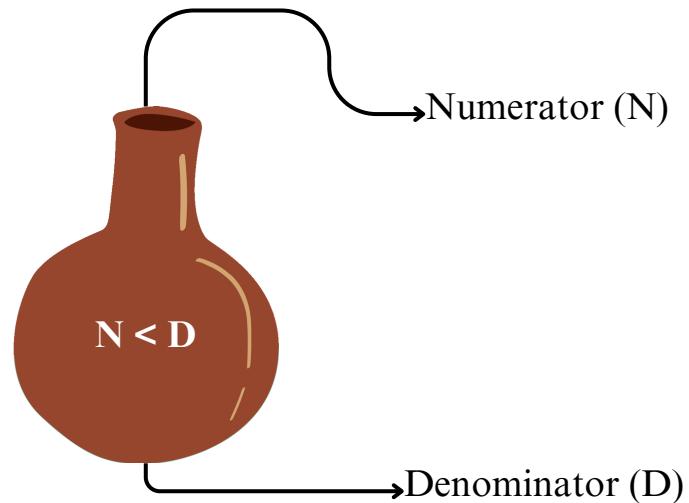
$$\frac{1}{3} \text{ of } 5 = \underline{\hspace{2cm}}$$

e)



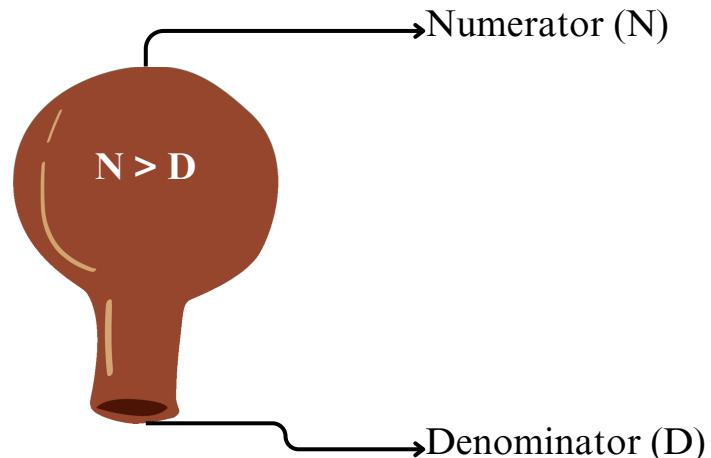
$$\frac{1}{4} \text{ of } 8 = \underline{\hspace{2cm}}$$

3.3. Introducing Proper Fraction, Improper Fractions and Mixed Number



When Numerator is smaller than the Denominator , it's a **PROPER FRACTION**

Eg. $\frac{5}{8}$, $\frac{9}{10}$, $\frac{6}{7}$, $\frac{8}{13}$, & so on



When Numerator is greater than the Denominator , it's a **IMPROPER FRACTION**

Eg. $\frac{8}{5}$, $\frac{10}{9}$, $\frac{7}{6}$, $\frac{13}{8}$, & so on

- How can we change IMPROPER FRACTION

INTO
MIXED FRACTION

$\frac{19}{5}$ is an Improper Fraction (as N>D)

So, we have to divide 19 by 5

$$\begin{array}{r}
 & 3 \\
 5 \overline{)19} \\
 -15 \\
 \hline
 4
 \end{array}$$

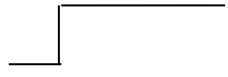
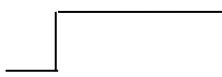
we need to write it $3\frac{4}{5}$

Que1. Write each improper fraction as a mixed number (or simplest form)

a) $\frac{83}{5} =$ _____ b) $\frac{7}{6} =$ _____ c) $\frac{32}{7} =$ _____

d) $\frac{66}{9} =$ _____ e) $\frac{53}{4} =$ _____ f) $\frac{79}{8} =$ _____

g) $\frac{45}{7} = \underline{\hspace{2cm}}$ h) $\frac{13}{6} = \underline{\hspace{2cm}}$ i) $\frac{23}{5} = \underline{\hspace{2cm}}$



j) $\frac{11}{4} = \underline{\hspace{2cm}}$ k) $\frac{25}{6} = \underline{\hspace{2cm}}$ l) $\frac{17}{3} = \underline{\hspace{2cm}}$



How to change the mixed number to an improper number

$$5\frac{7}{6}$$

+
—
X

$$\frac{(6 \times 5) + 7}{6} = \frac{30 + 7}{6} = \frac{37}{6}$$

↓
Improper fraction
(Because N>D)



Que1. change the following mixed number into an improper number:

a) $2 \frac{5}{6} = \underline{\hspace{2cm}}$ b) $6 \frac{1}{2} = \underline{\hspace{2cm}}$ c) $1 \frac{5}{18} = \underline{\hspace{2cm}}$

d) $3 \frac{8}{7} = \underline{\hspace{2cm}}$ e) $1 \frac{4}{5} = \underline{\hspace{2cm}}$ f) $8 \frac{2}{5} = \underline{\hspace{2cm}}$

g) $1 \frac{7}{18} = \underline{\hspace{2cm}}$ h) $4 \frac{5}{13} = \underline{\hspace{2cm}}$ i) $2 \frac{1}{4} = \underline{\hspace{2cm}}$

3.4. Equivalent Fractions

How to find an Equivalent Fraction:

$$\frac{7}{9} = \frac{?}{18}$$

$\times 2$

Here the denominator is being multiplied by 2

So, we have to multiply the numerator with the same number(i.e. by 2)

$$\therefore 7 \times 2 = 14$$

$$\therefore \frac{7}{9} = \frac{14}{18}$$

so, $\frac{7}{9}$ and $\frac{14}{18}$ are equivalent fraction

Que1. Find the equivalent fraction of the following:

a) $\frac{2}{9} = \frac{\square}{18}$

g) $\frac{7}{5} = \frac{14}{\square}$

m) $\frac{3}{4} = \frac{\square}{32}$

b) $\frac{5}{7} = \frac{\square}{28}$

h) $\frac{11}{12} = \frac{44}{\square}$

n) $\frac{8}{\square} = \frac{4}{5}$

c) $\frac{8}{13} = \frac{\square}{65}$

i) $\frac{\square}{9} = \frac{14}{18}$

o) $\frac{\square}{20} = \frac{1}{4}$

d) $\frac{10}{8} = \frac{\square}{24}$

j) $\frac{5}{6} = \frac{\square}{24}$

p) $\frac{12}{15} = \frac{4}{\square}$

e) $\frac{12}{\square} = \frac{4}{5}$

k) $\frac{3}{7} = \frac{15}{\square}$

q) $\frac{10}{20} = \frac{100}{\square}$

f) $\frac{\square}{2} = \frac{9}{6}$

l) $\frac{2}{5} = \frac{18}{\square}$

3.5. Reduce fraction to its simplest form

E.g. $\frac{12}{15}$

So, reduce a fraction to its simplest form, **divide** the numerator and denominator by the **same** number.

$$\frac{12 \div 3}{12 \div 3} = \frac{4}{5}$$

When 1 is the only common factor, the fraction is in its simplest form.

Que1. Reduce the following in its simplest form:

a) $\frac{27}{9} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

i) $\frac{24}{33} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

b) $\frac{25}{45} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

j) $\frac{32}{4} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

c) $\frac{6}{24} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

k) $\frac{6}{27} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

d) $\frac{4}{16} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

l) $\frac{12}{14} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

e) $\frac{13}{30} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

m) $\frac{80}{20} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

f) $\frac{12}{20} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

n) $\frac{32}{42} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

g) $\frac{12}{36} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

o) $\frac{14}{35} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

h) $\frac{12}{36} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

p) $\frac{32}{16} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

3.6. Ordering Fractions

How to compare the fraction having same DENOMINATOR:

$$\frac{5}{8} \quad \text{or} \quad \frac{7}{8}$$

↓ ↓

Denominator
(Same)

7 is greater than 5
 ∴ $\frac{7}{8}$ is greater than $\frac{5}{8}$
 $\frac{7}{8} > \frac{5}{8}$

Try it: Put $>$, $<$ or $=$

★ $\frac{2}{9}$ $\frac{3}{9}$

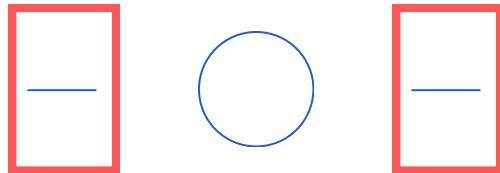
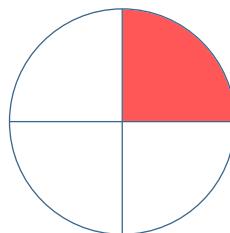
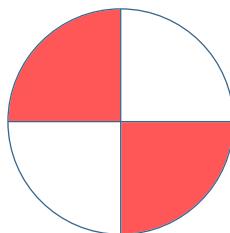
★ $\frac{6}{7}$ $\frac{5}{7}$

★ $\frac{8}{12}$ $\frac{2}{12}$

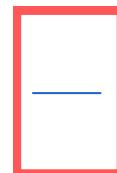
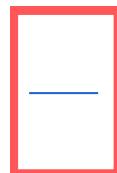
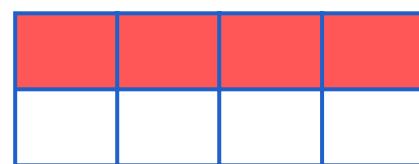
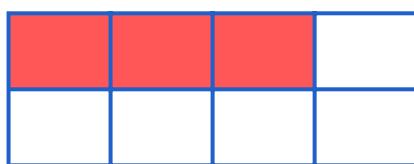
★ $\frac{20}{31}$ $\frac{30}{31}$

Que1. write the fraction for the shaded part then compare the following
(using diagrams)

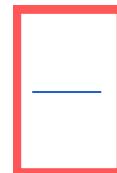
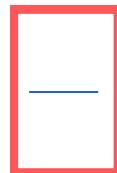
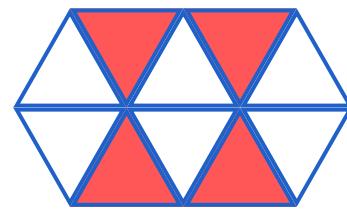
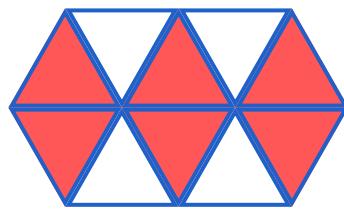
a)



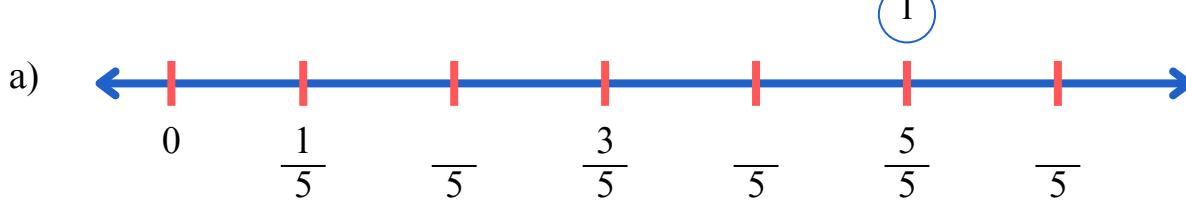
b)



c)



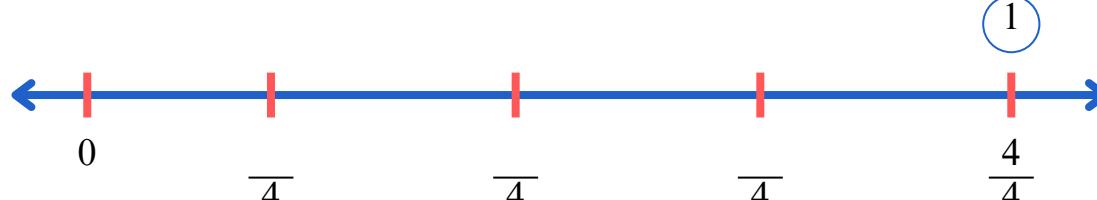
Que2. Complete the number line:



$$\frac{2}{5} \square \frac{4}{5}$$

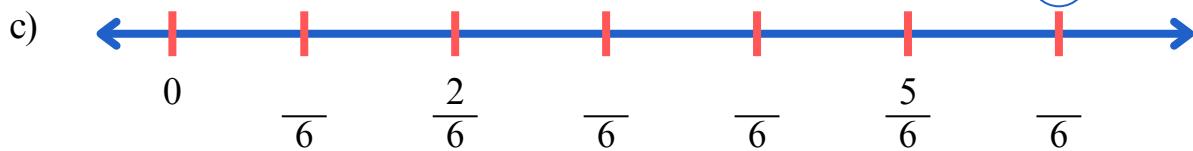
(Put >/<)

b)



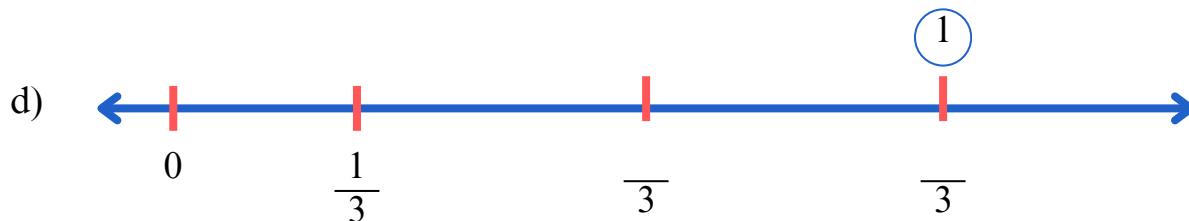
$$\frac{3}{4} \square \frac{1}{4}$$

(Put >/<)



$$\frac{3}{6} \quad \boxed{} \quad \frac{5}{6}$$

(Put >/<)



$$\frac{2}{3} \quad \boxed{} \quad \frac{1}{3}$$

(Put >/<)

Que3. Write the fractions in ascending order (Smallest to Largest)

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

A.O: < < <

b) $\frac{3}{10}, \frac{1}{10}, \frac{5}{10}, \frac{8}{10}, \frac{6}{10}$

A.O: < < < <

c) $\frac{11}{15}, \frac{9}{15}, \frac{6}{15}, \frac{14}{15}, \frac{13}{15}$

A.O: < < < <

d) $\frac{10}{17}, \frac{9}{17}, \frac{8}{17}, \frac{16}{17}, \frac{17}{17}$

A.O: < < < <

e) $\frac{10}{17}, \frac{9}{17}, \frac{8}{17}, \frac{16}{17}, \frac{17}{17}$

A.O: < < < <

Que4. Write the fractions in descending order (Largest to Smallest)

a) $\frac{10}{16}, \frac{9}{16}, \frac{15}{16}, \frac{8}{16}, \frac{3}{16}$

D.O: > > > >

b) $\frac{15}{20}, \frac{14}{20}, \frac{19}{20}, \frac{11}{20}, \frac{8}{20}$

D.O: > > > >

c) $\frac{9}{14}, \frac{7}{14}, \frac{13}{14}, \frac{5}{14}, \frac{12}{14}$

D.O: > > > >

d) $\frac{8}{9}, \frac{9}{9}, \frac{6}{9}, \frac{7}{9}, \frac{5}{9}$

D.O: > > > >

e) $\frac{10}{17}, \frac{15}{17}, \frac{8}{17}, \frac{16}{17}, \frac{9}{17}$

D.O: > > > >

Que5. Compare the fractions (having different denominator)

E.g. $\frac{9}{8}$ or $\frac{6}{7}$

$$\begin{array}{c} 9 \\ \diagup \quad \diagdown \\ 8 \quad 7 \end{array}$$

$(9 \times 7) \quad (6 \times 8)$

$63 > 48$ (L.H.S is Greater)

$\frac{9}{8} > \frac{6}{7}$ \therefore (Left hand fraction is Greater)



Que6. Put > , < or =

a) $\frac{4}{5}$ $\frac{9}{3}$

e) $\frac{8}{7}$ $\frac{3}{5}$

b) $\frac{6}{10}$ $\frac{5}{4}$

f) $\frac{10}{20}$ $\frac{5}{10}$

c) $\frac{8}{5}$ $\frac{2}{10}$

f) $\frac{2}{9}$ $\frac{9}{3}$

d) $\frac{9}{12}$ $\frac{3}{4}$

g) $\frac{7}{4}$ $\frac{5}{7}$

3.7. Adding and Subtracting fractions (with like denominators)

Que1. Add | Subtract the following fractions and write the answer in simplest form:

E.g. $\frac{5}{17} + \frac{4}{17} = \frac{5+4}{17} = \frac{9}{17}$ (Use the common denominator then Add / Subtract)

Reduce the following in its simplest form:

a) $\frac{3}{8} + \frac{2}{8} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

b) $\frac{1}{10} + \frac{4}{10} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

c) $\frac{6}{11} + \frac{2}{11} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

d) $\frac{7}{10} - \frac{3}{10} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

e) $\frac{13}{30} - \frac{13}{30} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

f) $\frac{12}{15} + \frac{2}{15} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

g) $\frac{12}{25} - \frac{12}{25} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

h) $\frac{7}{18} + \frac{5}{18} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

i) $\frac{15}{30} + \frac{5}{30} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

j) $\frac{11}{16} - \frac{5}{16} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

k) $\frac{9}{10} - \frac{2}{10} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

l) $\frac{4}{12} + \frac{3}{12} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

m) $\frac{12}{15} - \frac{3}{15} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

3.8. Adding fractions (with unlike denominators)

E.g. $\frac{2}{3} + \frac{1}{4}$

Take LCM of 3 & 4 (=12)

★ $\frac{2}{3} \times \text{LCM} = \frac{2}{3} \times \frac{12}{1} = \frac{24}{3} = \textcircled{8}$

★ $\frac{1}{4} \times \text{LCM} = \frac{1}{4} \times \frac{12}{1} = \frac{12}{4} = \textcircled{3}$

Now write the denominator (Our LCM)

$$\frac{^*8+^*3}{\text{LCM}} = \frac{11}{12}$$

NOTE: (If necessary, Change, the improper fractions to simplest form)



Que1. Add the following fraction and write the answer in the simplest form:

a) $\frac{7}{8} + \frac{2}{5}$

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

c) $\frac{2}{5} + \frac{5}{7}$

d) $\frac{1}{7} + \frac{2}{3}$

e) $\frac{1}{2} + \frac{7}{10}$

f) $\frac{3}{4} + \frac{5}{6}$



$$g) \quad \frac{2}{3} + \frac{1}{12}$$

$$h) \quad \frac{6}{7} + \frac{1}{3}$$

$$i) \quad \frac{3}{3} + \frac{1}{10}$$

$$j) \quad \frac{4}{7} + \frac{5}{6}$$

$$k) \quad \frac{1}{2} + \frac{3}{4}$$

$$l) \quad \frac{1}{3} + \frac{5}{6}$$

$$m) \quad \frac{5}{7} + \frac{1}{14}$$

$$n) \quad \frac{2}{5} + \frac{7}{8}$$



3.9. Subtracting Fractions (with unlike denominators)

E.g. $\frac{3}{5} + \frac{2}{7}$

Take LCM of 5 & 7 (=35)

★ $\frac{3}{5} \times \text{LCM} = \frac{3}{5} \times \frac{35}{1} = 21$

★ $\frac{2}{7} \times \text{LCM} = \frac{2}{7} \times \frac{35}{1} = 10$

Now write the denominator (Our LCM)

$$\frac{21-10}{\text{LCM}} = \frac{11}{35}$$

NOTE: (Write the difference in the simplest form)

Que1. Add the following fraction and write the answer in the simplest form:

a) $\frac{2}{3} - \frac{2}{7}$

b) $\frac{5}{6} - \frac{1}{3}$

c) $\frac{2}{5} - \frac{1}{9}$

d) $\frac{3}{4} - \frac{2}{9}$

e) $\frac{6}{7} - \frac{3}{5}$

f) $\frac{5}{6} - \frac{3}{5}$

g) $1 - \frac{5}{6}$

h) $\frac{1}{9} - \frac{1}{18}$

i) $\frac{3}{4} + \frac{7}{12}$

j) $\frac{3}{8} + \frac{7}{8}$

k) $1 - \frac{3}{7}$

l) $\frac{2}{3} - \frac{1}{6}$

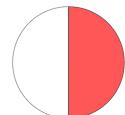
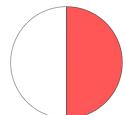
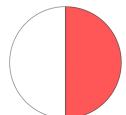
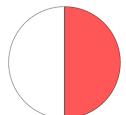
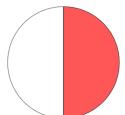
m) $\frac{9}{10} - \frac{2}{5}$

n) $\frac{3}{4} - \frac{3}{8}$

3.10. Multiplying fractions (Using diagrams)

E.g. Visually

$$5 \times \frac{1}{2} \quad (\text{Five times half})$$

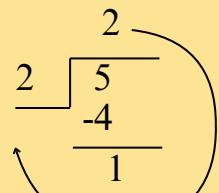


$$= \frac{5}{2} = 2\frac{1}{2}$$

Mathmatically

$$5 \times \frac{1}{2} = \frac{5}{1} \times \frac{1}{2} = \frac{5}{2} = 2\frac{1}{2}$$

x *x*



Que1. Use diagram to solve the following:

a) $7 \times \frac{1}{2}$

b) $8 \times \frac{1}{3}$

c) $6 \times \frac{1}{4}$

d) $3 \times \frac{2}{5}$

Que2. Multiply the following and write the answer in simplest form / Mixed fraction.

Note: If the answer is in improper fraction, we can convert it into mixed fraction

a) $\frac{3}{5} \times \frac{2}{3} =$ _____

b) $\frac{1}{6} \times \frac{8}{9} =$ _____

c) $\frac{5}{7} \times \frac{7}{8} =$ _____

d) $\frac{15}{9} \times \frac{3}{15} =$ _____

e) $\frac{1}{8} \times \frac{4}{5} =$ _____

f) $\frac{3}{6} \times \frac{3}{4} =$ _____

g) $12 \times \frac{1}{3} =$ _____

h) $\frac{4}{5} \times 20 =$ _____

i) $\frac{5}{9} \times \frac{3}{5} =$ _____

j) $\frac{1}{2} \times \frac{5}{11} =$ _____

j) $\frac{7}{12} \times \frac{8}{3} =$ _____

k) $\frac{3}{4} \times \frac{1}{12} =$ _____

l) $\frac{2}{9} \times \frac{9}{10} =$ _____

m) $\frac{70}{10} \times \frac{10}{80} =$ _____

n) $\frac{1}{5} \times \frac{1}{9} =$ _____

o) $\frac{2}{2} \times \frac{6}{9} =$ _____

p) $1 \times \frac{8}{9} =$ _____

3.11. Multiplying the mixed Numbers

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

(convert mixed number into improper fraction)

$$\frac{9}{4} \times \frac{7}{3} = \frac{9 \times 7}{4 \times 3} = \frac{63}{12}$$

Now converting improper fraction into mixed fraction

Note: our question was in mixed fraction, we need to write our answer in mixed fraction

$$5\frac{3}{12}$$

Answer

$$\begin{array}{r} 5 \\ 12 \overline{)63} \\ -60 \\ \hline 3 \end{array}$$

Que1. Multiply the following:

a) $2\frac{1}{6} \times 7\frac{1}{2}$

b) $8\frac{1}{6} \times 2\frac{1}{2}$

c) $3\frac{1}{8} \times 1\frac{5}{8}$

d) $2\frac{1}{5} \times 1\frac{1}{4}$

e) $3\frac{5}{6} \times 3\frac{1}{5}$

f) $1\frac{5}{9} \times 3\frac{1}{2}$

g) $5\frac{3}{5} \times 2\frac{1}{4}$

h) $2\frac{6}{7} \times 5\frac{1}{7}$

i) $5\frac{1}{2} \times 1\frac{1}{6}$

j) $1\frac{7}{10} \times 4\frac{3}{4}$

3.12. Divide Fractions by whole numbers

E.g.

$$\frac{1}{4} \div \frac{7}{1}$$

Divisor

↓ ↓ ↓

$\frac{1}{4} \times \frac{1}{7}$

(Change \div sign into \times then reciprocal of divisor)

$$\frac{1}{4} \times \frac{1}{7} = \frac{1}{28}$$

Answer
(Simplest Form)



Que1. Divide the following and write the answer in the simplest form:

a) $\frac{1}{12} \div 4$

b) $\frac{1}{8} \div 5$

c) $\frac{1}{9} \div 6$

d) $\frac{2}{3} \div 5$

e) $\frac{4}{15} \div 3$

f) $\frac{5}{12} \div 2$

g) $\frac{3}{4} \div 5$

h) $\frac{1}{6} \div 3$

i) $\frac{2}{9} \div 7$

j) $\frac{3}{4} \div 2$

3.13. Dividing whole numbers by fractions

E.g.

$$\begin{array}{r}
 4 \quad . \quad 1 \\
 \downarrow \quad | \quad \downarrow \\
 \frac{4}{1} \times \frac{1}{16} = \frac{64}{1} = 64 \text{ Answer}
 \end{array}$$

Que1. Divide and write the answer in simplest form:

a) $9 \div \frac{1}{4}$

b) $6 \div \frac{3}{5}$



$$\text{c) } 4 \div \frac{12}{15}$$

$$\text{d) } 5 \div \frac{10}{9}$$

$$\text{e) } 2 \div \frac{6}{11}$$

$$\text{f) } 10 \div \frac{4}{3}$$

$$\text{g) } 18 \div \frac{2}{5}$$

$$\text{h) } 3 \div \frac{1}{9}$$

$$\text{i) } 12 \div \frac{3}{7}$$

$$\text{j) } 14 \div \frac{2}{7}$$

Chapter 4

SIMPLE EQUATIONS

4.1. Finding missing number in an equation (use guess and check method)

E.g. $4 + \boxed{?} = 6$

Guess	Check	or
2	$2+2=8$	
3	$2+3=5$	
4	$2+4=6$	
LHS = RHS		

$\boxed{?} = 6$

Que1. Find the missing number using guess and check method

a) $4 + \boxed{\star} = 6$

$\boxed{\star} = \underline{\hspace{2cm}}$

Guess	Check	or



b) - 2 = 8

= _____

Guess	Check	✓ or ✗

c) + 3 = 8

= _____

Guess	Check	✓ or ✗

d) - 3 = 10

= _____

Guess	Check	✓ or ✗

e) $\boxed{\star} - 6 = 11$

$\boxed{\star} = \underline{\hspace{2cm}}$

Guess	Check	✓ or ✗

f) $13 - \boxed{\text{cone}} = 8$

$\boxed{\text{cone}} = \underline{\hspace{2cm}}$

Guess	Check	✓ or ✗

Que2. Find the missing numbers with the help of diagrams:

E.g. $4 + x = 9$

$x = \underline{\hspace{2cm}}$



$\therefore x = 5$

a) $6 + y = 11$
 $y = \underline{\hspace{2cm}}$

b) $z + 5 = 12$
 $z = \underline{\hspace{2cm}}$

c) $k - 4 = 3$
 $k = \underline{\hspace{2cm}}$

d) $m - 7 = 4$
 $m = \underline{\hspace{2cm}}$

e) $9 \div b = 3$
 $b = \underline{\hspace{2cm}}$

f) $x \times 3 = 6$
 $x = \underline{\hspace{2cm}}$

Que3. solve the following equations (with any method)

a) $10 + a = 15$
 $a = \underline{\hspace{2cm}}$

b) $15 - b = 3$
 $b = \underline{\hspace{2cm}}$

c) $100 - c = 40$
 $c = \underline{\hspace{2cm}}$

d) $18 + d = 29$
 $d = \underline{\hspace{2cm}}$

e) $8 + e = 15$
 $e = \underline{\hspace{2cm}}$

f) $f - 9 = 49$
 $f = \underline{\hspace{2cm}}$

g) $12 - g = 4$
 $g = \underline{\hspace{2cm}}$

h) $5 - h = 3$
 $h = \underline{\hspace{2cm}}$

i) $i + 6 = 15$
 $i = \underline{\hspace{2cm}}$

j) $17 + j = 50$
 $j = \underline{\hspace{2cm}}$

4.2. Solve the equation:

E.g. $18 \times x = 54$

$$18 \times 1 = 54$$

$$18 \times 2 = 36$$

$$18 \times 3 = 54$$

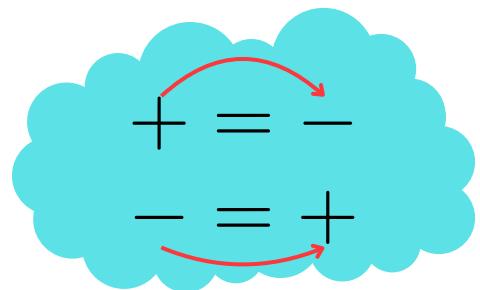
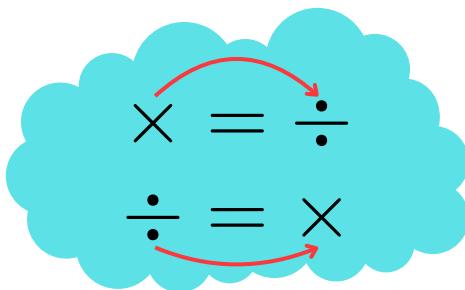
∴ $x = 3$

or

$$18 \times x = 54$$

$$x = \frac{54}{18}$$

$$x = 3$$



E.g. $k \div 7 = 14$

$$k = 14 \times 7$$

$$k = 98$$

or

$$k \div 7 = 14$$

(guss method)

$$\frac{98}{7} = 14$$

$$k = 98$$

a) $p \div 100 = 5$

e) $49 - x = 13$

b) $x \times 4 = 50$

f) $y + 41 = 79$

c) $l \times 3 = 27$

g) $33 - m = 13$

d) $10 \times d = 50$

h) $17 + z = 29$

► Find the missing number to solve the above riddle

★ I'm a vegetable that grows eggs. what am I ?



$\underline{22}$

$\underline{3}$

$\underline{25}$

$\underline{20}$

$\underline{49}$

$\underline{7}$

$\underline{32}$

$\underline{24}$

a) $49 - a = 7$

a = _____

e) $56 - n = 24$

n = _____

b) $g \times 10 = 250$

g = _____

f) $l \div 12 = 2$

l = _____

c) $e + 20 = 42$

e = _____

g) $l - 13 = 36$

l = _____

d) $600 \div i = 30$

i = _____

h) $g \times 8 = 24$

g = _____

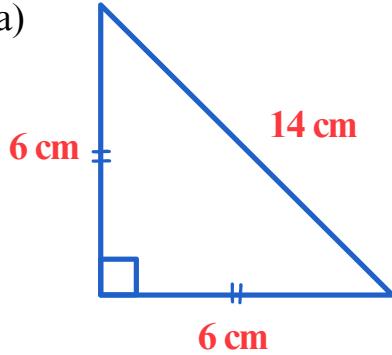
Chapter 5

PERIMETER, AREA AND VOLUME

5.1. Calculating the Perimeter of the given polygons (Without using formulae)

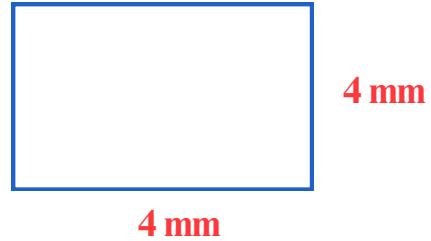
Que1. Find the perimeter of the following:

a)



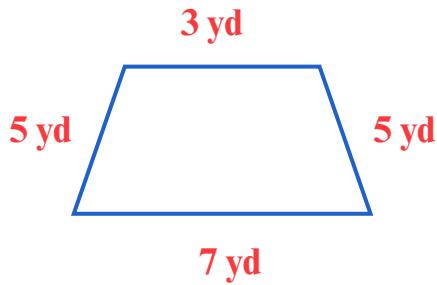
$$p = \underline{\hspace{2cm}} \text{ cm}$$

b)



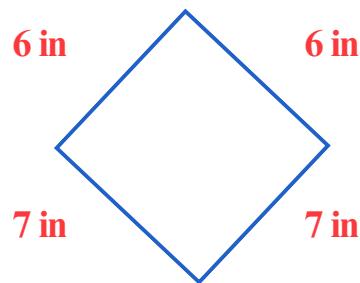
$$p = \underline{\hspace{2cm}} \text{ m}$$

c)

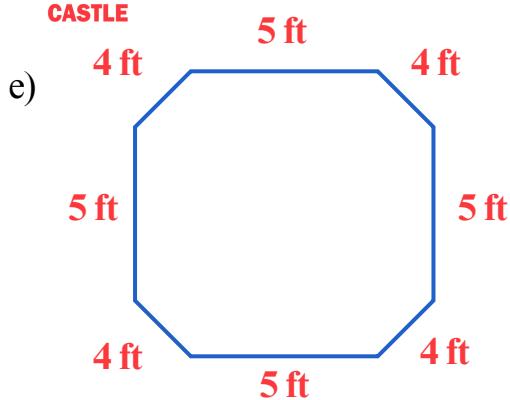


$$p = \underline{\hspace{2cm}} \text{ yd}$$

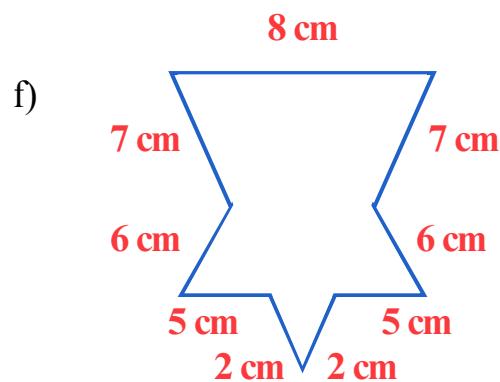
d)



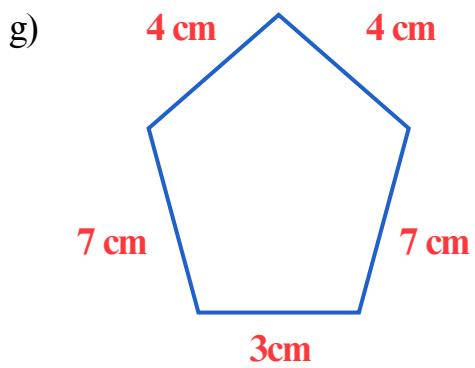
$$p = \underline{\hspace{2cm}} \text{ in}$$



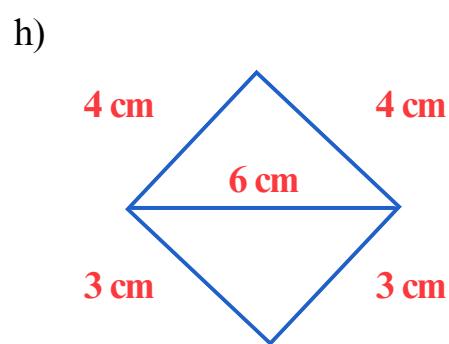
$$p = \underline{\hspace{2cm}} \text{ ft}$$



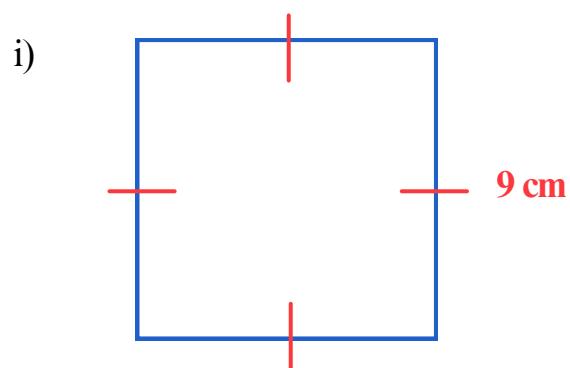
$$p = \underline{\hspace{2cm}} \text{ cm}$$



$$p = \underline{\hspace{2cm}} \text{ cm}$$



$$p = \underline{\hspace{2cm}} \text{ cm}$$



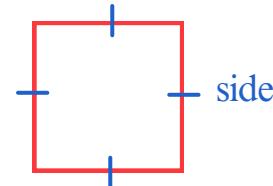
$$p = \underline{\hspace{2cm}} \text{ cm}$$



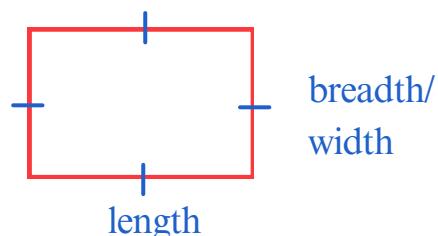
$$p = \underline{\hspace{2cm}} \text{ cm}$$

5.2. Calculate the Area of Polygons (Using formulae)

- Area of a Square = $Side \times Side$



- Area of a Rectangle = $Length \times Breadth$
or
 $Length \times Width$



► Area is a number of square units needed to cover a particular surface

E.g.

In sudoku

1 2 3

1			
2			
3			

Number of Rows = 3

Number of Column = 3

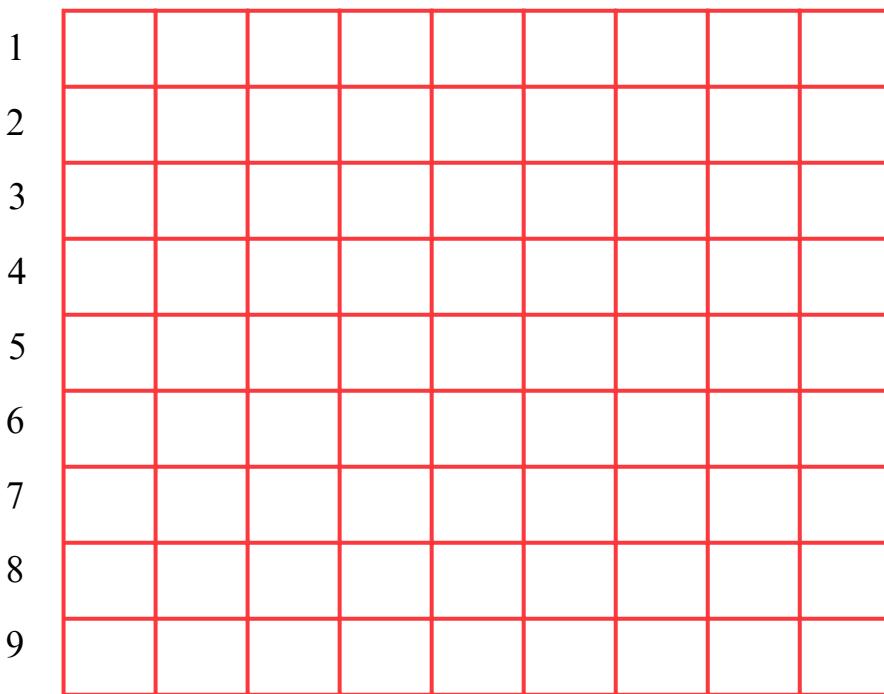
∴ it's 3×3 grid

∴ Number of square units = 3×3

9 sq. units

Try it

1 2 3 4 5 6 7 8 9



Number of Rows = 9

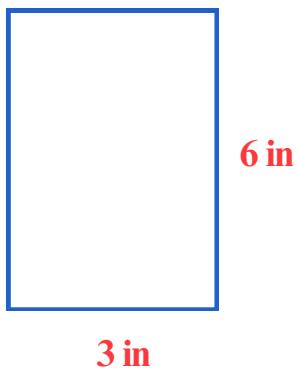
Number of Column = 9

∴ it's 9×9 grid

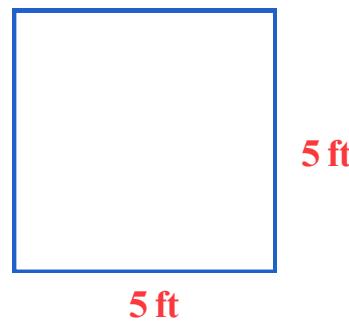
∴ Number of square units = _____ sq. units

Que1. Calculate the area of the following square & rectangle:

a)

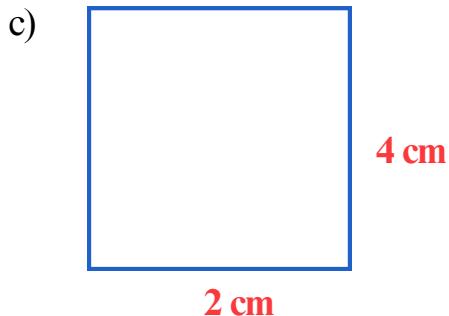


b)

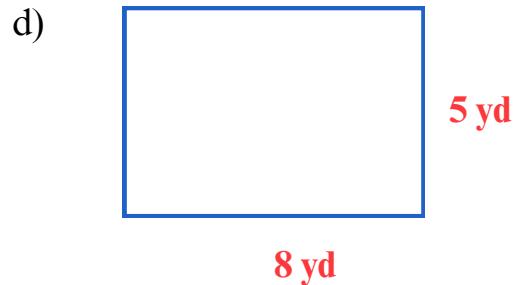


Answer: _____ sq. in

Answer: _____ sq. ft



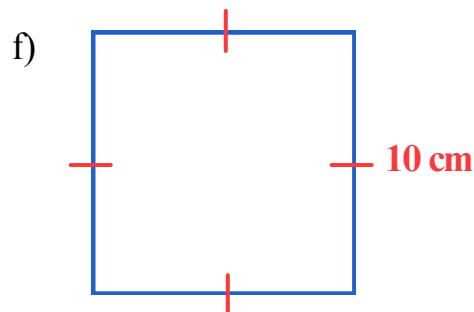
Answer: _____ sq. cm



Answer: _____ sq. yd



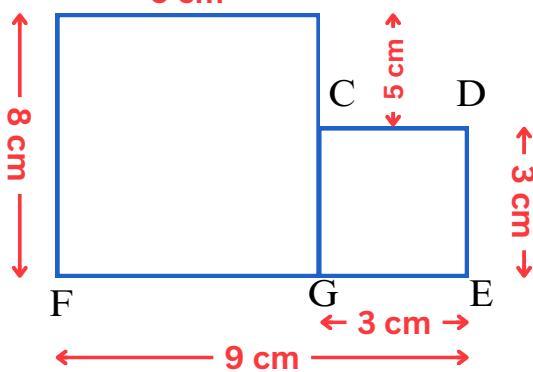
Answer: _____ sq. in



Answer: _____ sq. cm

Que2. Find the Area of the following figures:

E.g. A  B



To find area of ABCEDF

$$BG = 8 \text{ cm} = AF$$

$$DE = 3 \text{ cm}$$

$$BC = 8 \text{ cm} - 3 \text{ cm} = 5 \text{ cm}$$

$$EF = 9 \text{ cm}$$

$$AB = GF = 6 \text{ cm}$$

$$EG = EF - GF$$

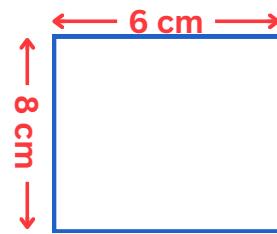
$$EG = 9 \text{ cm} - 6 \text{ cm} = 3 \text{ cm}$$

Now we will find area of ABGF (Rectangel)

$$\therefore \text{area of ABGH} = \text{Length} \times \text{Breadth}$$

$$= 6\text{cm} \times 8\text{cm}$$

$$= 48\text{sq. cm}$$

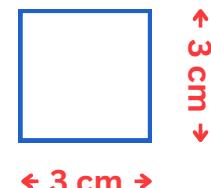


Now we will find area of CDEF (Square)

$$\therefore \text{area of CDEG} = \text{side} \times \text{side}$$

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

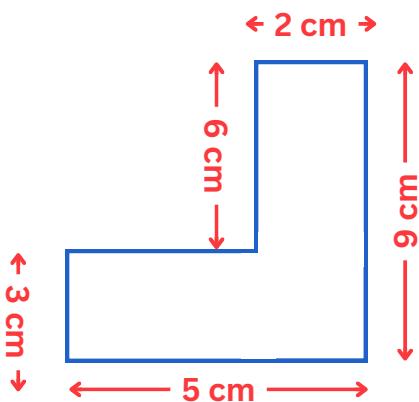
$$= 9\text{sq. cm}$$



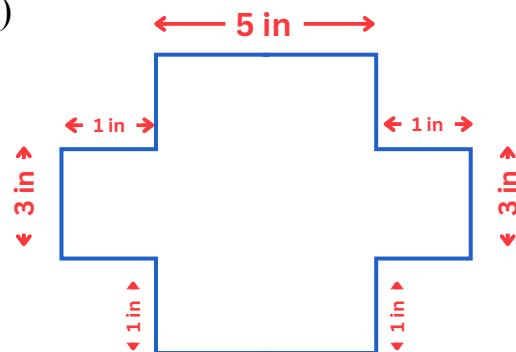
$$\therefore \text{area of (Whole Figure) ABCDEF} = (48 + 9) \text{ sq.cm}$$

$$= 57 \text{ sq.cm}$$

a)



b)

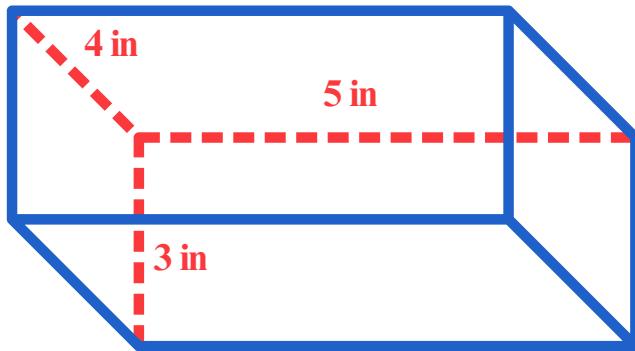


Answer: _____ sq. cm

Answer: _____ sq. in

5.3. How to calculate VOLUME

E.g.



Length = 5 in

Breadth = 3 in

Height = 4 in

$$\begin{aligned}
 \text{Volume} &= \text{Length} \times \text{Width} \times \text{Height} \\
 &= 5\text{in} \times 3\text{in} \times 4\text{in} \\
 &= 60 \text{ cubic inches}
 \end{aligned}$$

Que1. Find the volume of the following with given measurement:

a) Length = 9 yd

Width = 2 yd

Height = 7 yd

Volume = _____ cubic yd

b) Length = 3 in

Width = 4 in

Height = 3 in

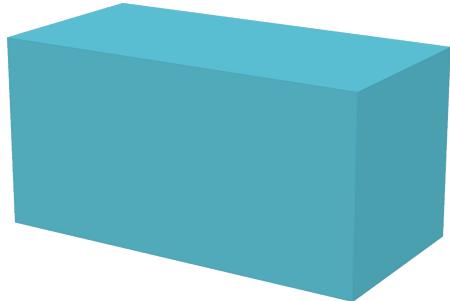
Volume = _____ cubic In

c) Length = 5 ft

Width = 1 ft

Height = 4 ft

Volume = _____ cubic ft



d) Length = 3 in

Width = 3 in

Height = 3 in

Volume = _____ cubic In

e) Length = 10 ft

Width = 3 ft

Height = 4 ft

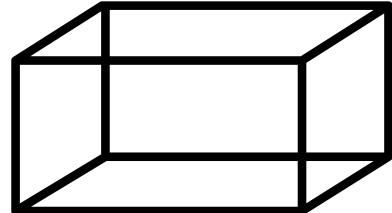
Volume = _____ cubic ft

f) Length = 8 in

Width = 7 in

Height = 2 in

Volume = _____ cubic In



g) Length = 8 ft

Width = 5 ft

Height = 3 ft

Volume = _____ cubic ft

Chapter 6

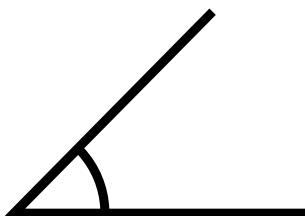
ANGLES AND TRIANGLES

6.1. Classification of Angles

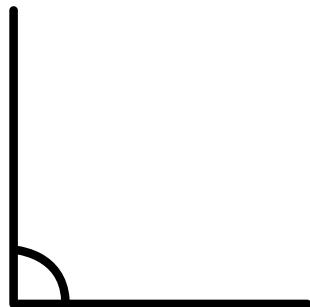
- Angles are classified according to their sizes.
- A protractor is used to measure an angle.
- The angle is measured in degrees.

Here are the types of Angle

Type 1: ACUTE ANGLE (less than 90)



Type 2: RIGHT ANGLE (Equal to 90)



Type 3: OBTUSE ANGLE (between 90 and 180)

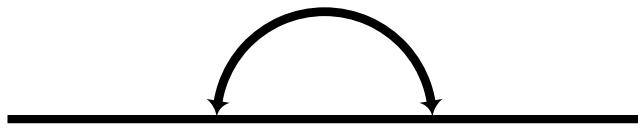
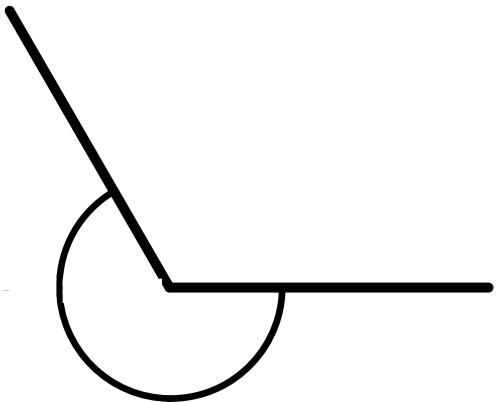
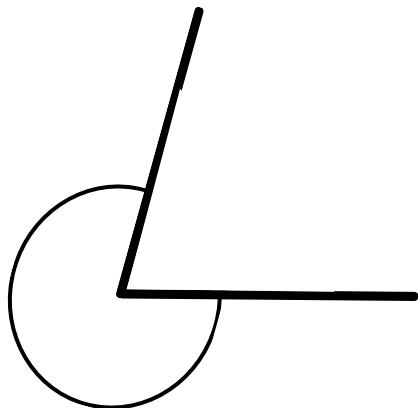
(ie. greater than 90 but less than 180)



Type 4: STRAIGHT ANGLE (equals 180)

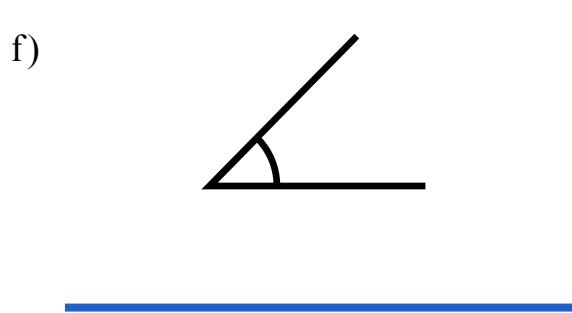
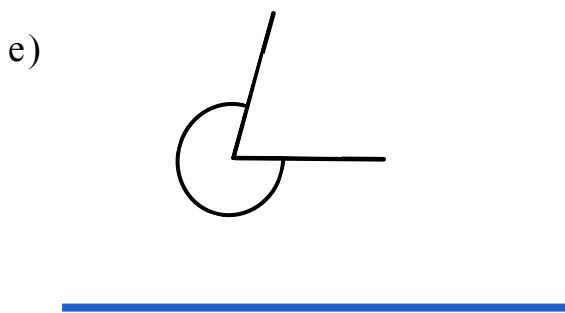
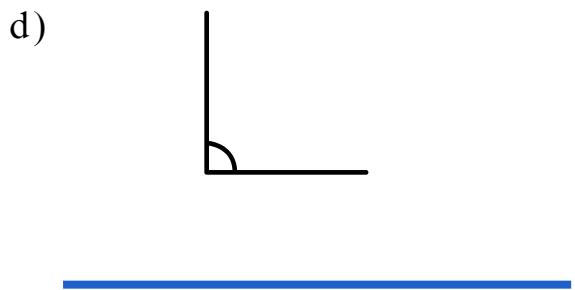
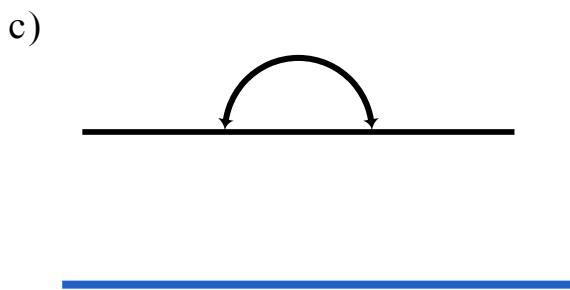
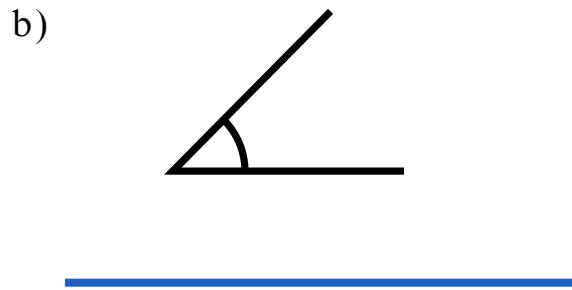
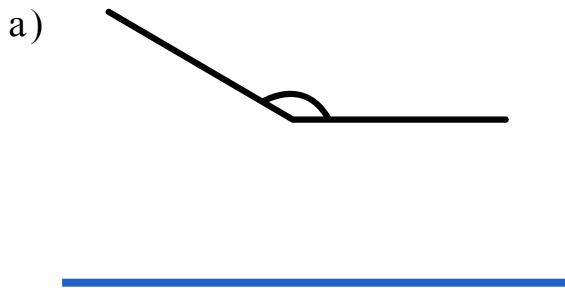


Type 5: REFLEX ANGLE (remaining angle)



6.2. Naming the angle

Que1. Identify the angle as RIGHT | ACUTE | STRAIGHT | OBTUSE .



g) 96° = _____

h) 122° = _____

i) 118° = _____

j) 89° = _____

6.3. How to draw angles using a protractor

Que1. Draw the angles with the help of a protractor. Also, classify them

a) 56°	b) 125°
c) 90°	d) 170°
e) 145°	f) 70°
g) 160°	h) 20°



Que2. Draw and label the following angles:

- a) An angle that is smaller than a straight angle but greater than a right angle.

- b) An angle that is greater than an acute but smaller than an obtuse angle.

- c) An angle that is greater than 70° but less than a right angle.



Que3. True / False :

a) An angle greater than 90° and less than 180° is called an acute angle = _____

b) The two right angles form a straight angle
= _____

c) The half of the straight angle is 45° = _____

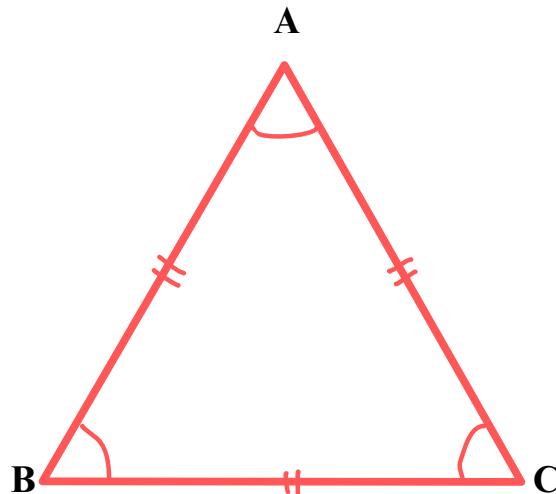
d) A complete angle is of 360° = _____

e) half of a right angle is 45° = _____

f) An obtuse angle is of 90° = _____

g) Two straight angles make a complete angle = _____

TRIANGLES



A triangle has

3 sides (AB , BC , CA)

3 angles ($\angle A$, $\angle B$, $\angle C$)

and

 3 vertices (Vertex A , B & C)

6.4. Classification of Triangles (By Angles)

I

Acute angled Triangle

III

Obtuse angled Triangle

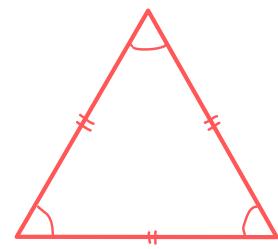
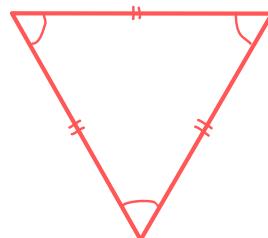
III

Right angled Triangle

I

Acute angled
Triangle

All the angles are acute angles (i.e less than 90°)



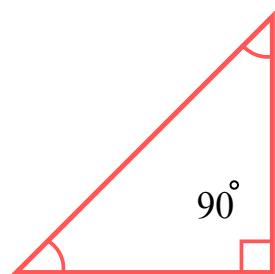
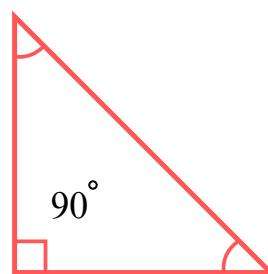
a

b

II

Right angled
Triangle

(Only one angle is of 90°)



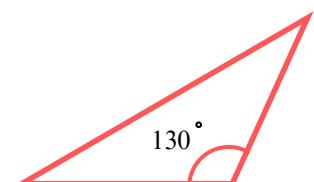
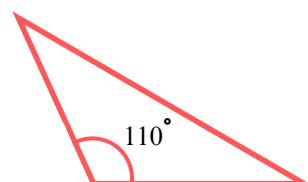
a

b

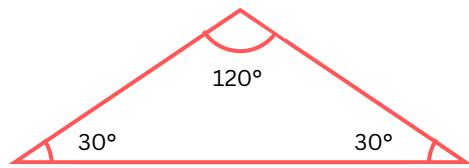
III

Obtuse angled
Triangle

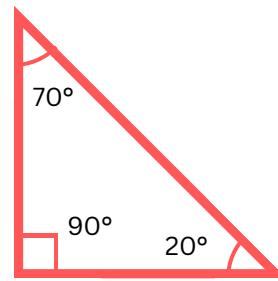
(Only one angle is greater than 90°)



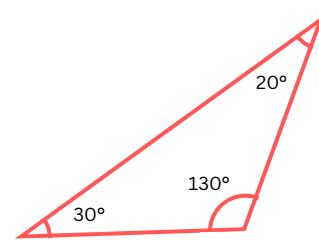
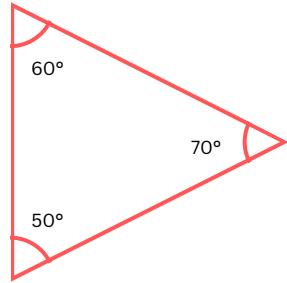
Que1. Classify the triangles on the basic of their angles.



a) _____

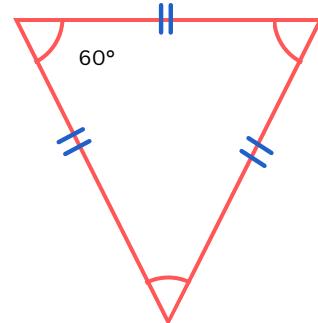
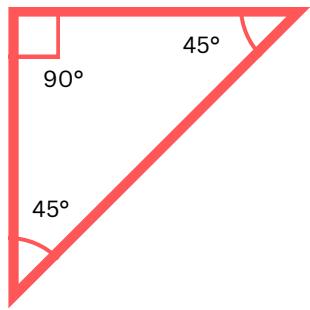


b) _____



c) _____

d) _____

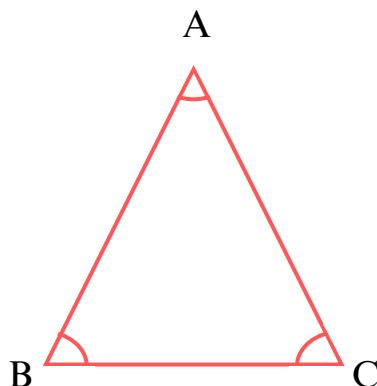


e) _____

f) _____

Que2. Measure each angle a triangle with the help of protractor and classify the triangle:

a)



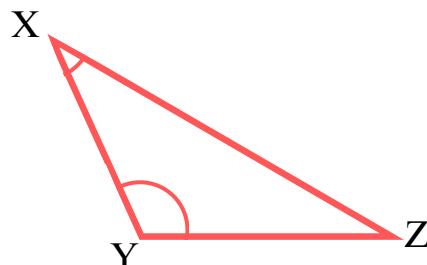
$$\angle A = \underline{\hspace{2cm}}$$

$$\angle B = \underline{\hspace{2cm}}$$

$$\angle C = \underline{\hspace{2cm}}$$

Type of a Triangle :

b)



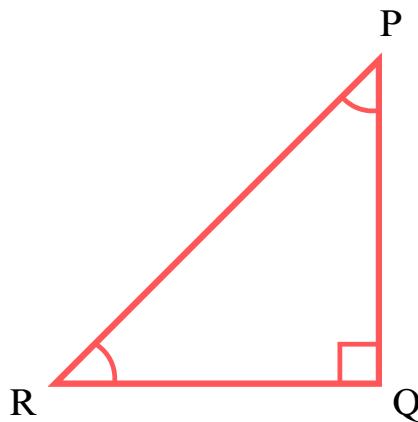
$$\angle X = \underline{\hspace{2cm}}$$

$$\angle Y = \underline{\hspace{2cm}}$$

$$\angle Z = \underline{\hspace{2cm}}$$

Type of a Triangle :

c)

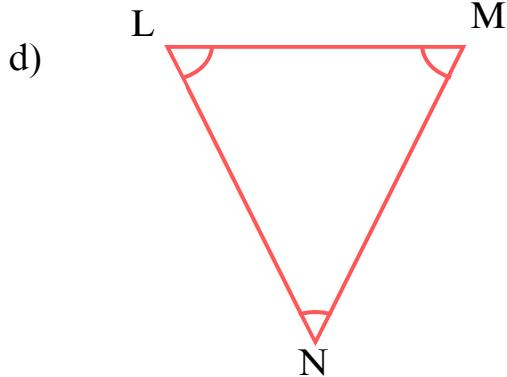


$$\angle P = \underline{\hspace{2cm}}$$

$$\angle Q = \underline{\hspace{2cm}}$$

$$\angle R = \underline{\hspace{2cm}}$$

Type of a Triangle :

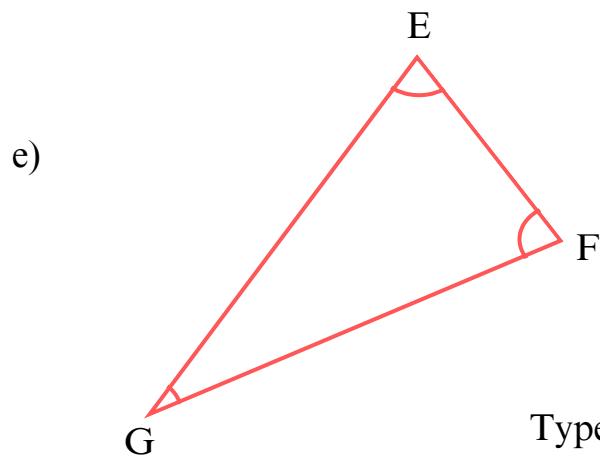


$$\angle L = \underline{\hspace{2cm}}$$

$$\angle M = \underline{\hspace{2cm}}$$

$$\angle N = \underline{\hspace{2cm}}$$

Type of a Triangle :



$$\angle E = \underline{\hspace{2cm}}$$

$$\angle F = \underline{\hspace{2cm}}$$

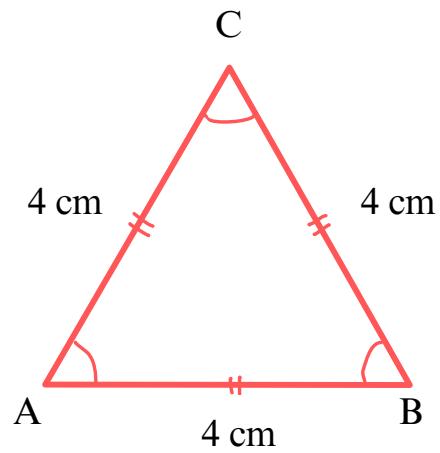
$$\angle G = \underline{\hspace{2cm}}$$

Type of a Triangle :

6.5. Classification of a Triangle (On the basis of it's sides)

I

Equilateral
Triangle



All the **three** sides are **equal**.

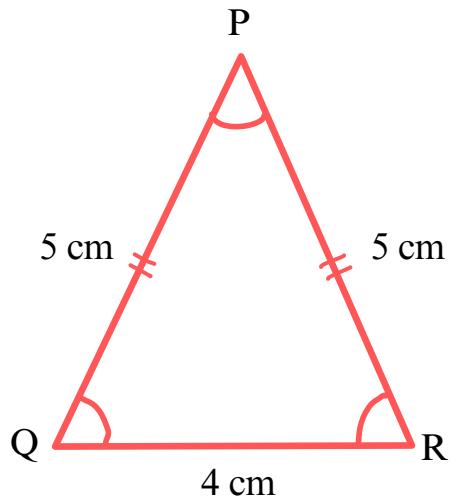
Here, $AB = BC = CA$

II

Isosceles
Triangle

All the **two** sides are **equal**.

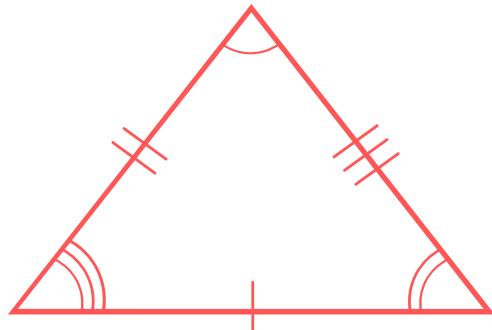
Here, $PQ = PR = 5 \text{ cm}$



III

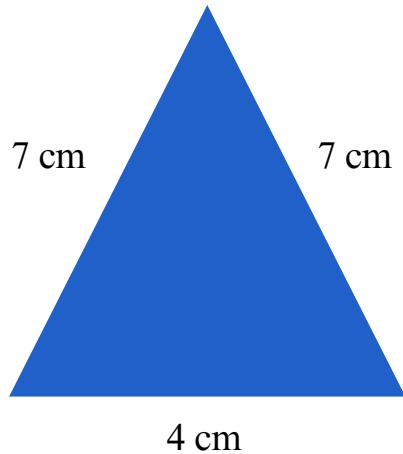
Scalene
Triangle

Here **no** side is **equal**

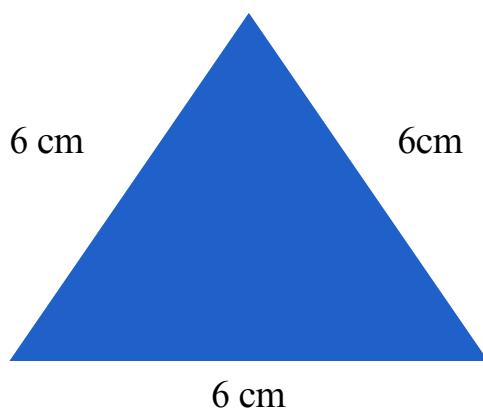


Que1. Classify the triangle by its sides:

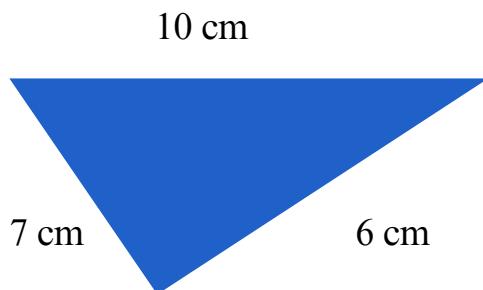
a)



b)



c)



d) In $\triangle ABC$

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

$$BC = 8 \text{ cm}$$

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

Type of a Triangle =

e) In $\triangle PQR$

$$PQ = 8 \text{ cm}$$

$$QR = 8 \text{ cm}$$

$$RP = 8 \text{ cm}$$

Type of a Triangle =

f) In $\triangle XYZ$

$$XY = 15 \text{ cm}$$

$$YZ = 12 \text{ cm}$$

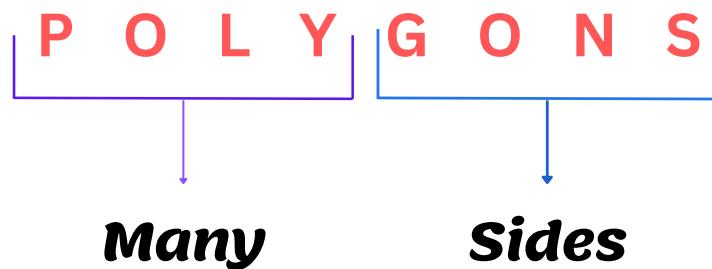
$$ZX = 10 \text{ cm}$$

Type of a Triangle =

Chapter 7

TWO DIMENSIONAL SHAPES

7.1. Introducing Polygons



- ★ A closed figure having three or more sides is called **polygon**

Note :

If all the sides of a polygon are equal, the polygon is said to be a regular polygon

Name of the polygon having:

3 Sides = Triangle

4 Sides = Quadrilateral

5 Sides = Pentagon

6 Sides = Hexagon

7 Sides = Septagon

8 Sides = Octagon

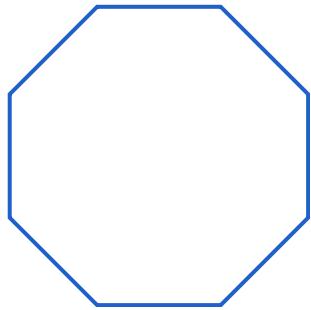
9 Sides = Nonagon

10 Sides = Decagon

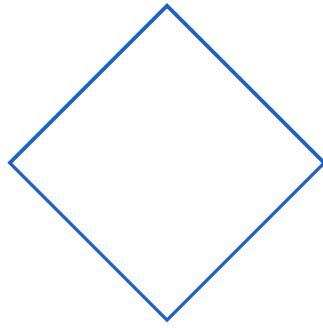
7.2. Identify the Polygons

Que1. Identify the Polygons:

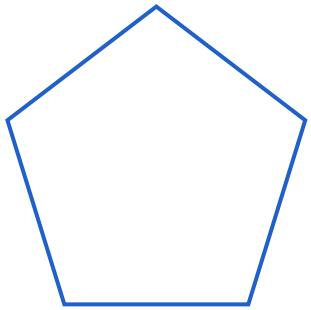
a)



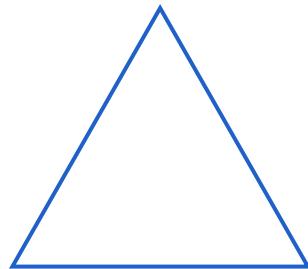
b)



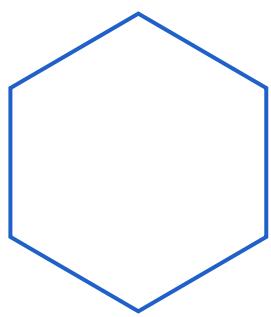
c)



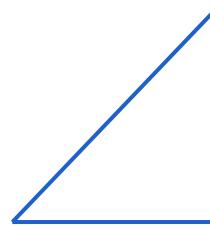
d)



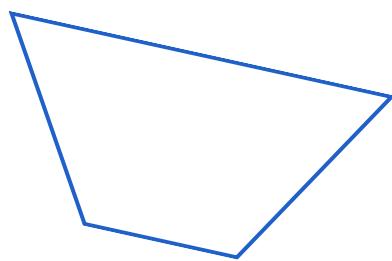
e)



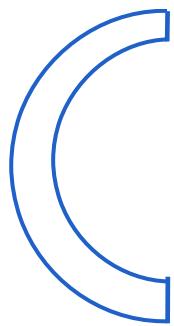
f)



g)



h)



i)





Identify polygons:

**Que1. Can you Draw a sketch of the following ?
polygons using the given clues.
(Also label the length of the each side in your drawing)**

1. This polygon has the following characteristics :

- It has a perimeter of 18 cm.
- it has four sides.
- It has four right-angle
- It has two sides that are each 5 cm
- longer than each of the other sides

: Name of the polygon

: Sketch



2. This polygon has the following characteristics :

- It has a perimeter of 8.4 cm.
- it has three acute angles.
- It has three sides.
- the three sides are equal in length

: Name of the polygon

: Sketch

3. This polygon has the following characteristics :

- It has a perimeter of 12 cm.
- it has four equal sides.
- the three sides are equal in length

: Name of the polygon

: Sketch

Chapter 8

3-D SHAPES

8.1. Introducing the difference between prism and pyramids:

WHAT ARE :

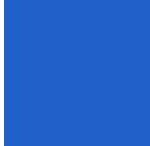
2 - D

- Has : Length
- and
- Breadth / Width

3 - D

- Has : Length
- Breadth / Width
- and
- Height

E.g.

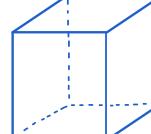
- 1)  Square

- 2)  Rectangle

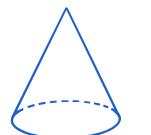
- 3)  Triangle

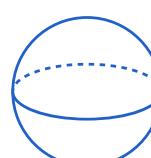
- 4)  Circle

E.g.

- 1)  Cube

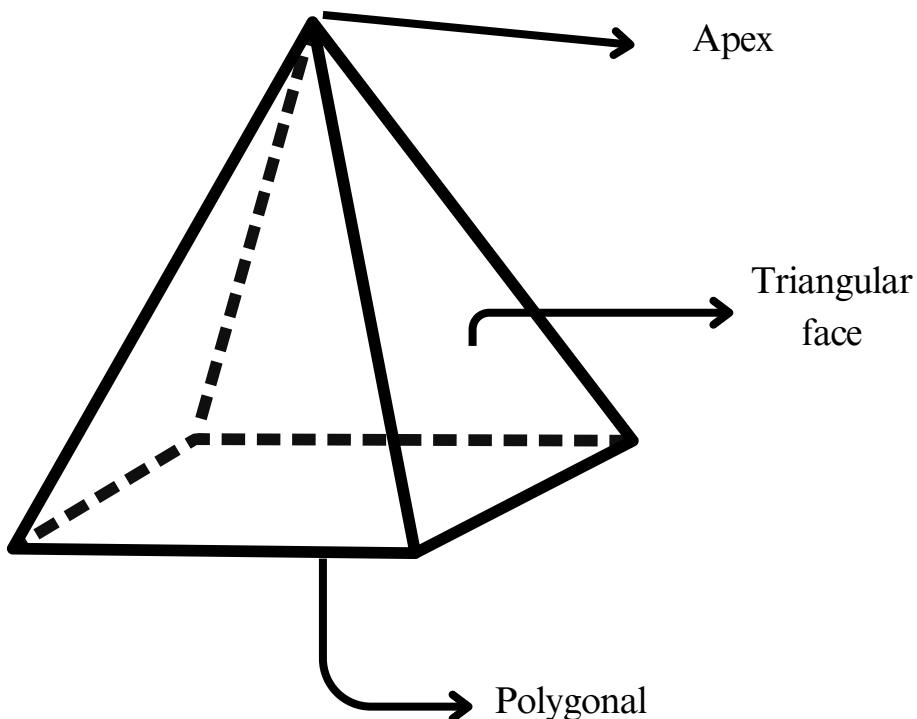
- 2)  Cuboid

- 3)  Cone

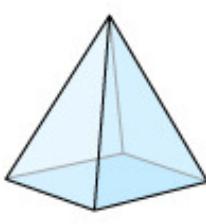
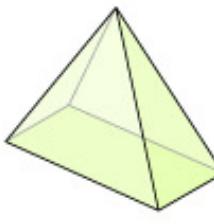
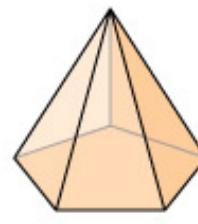
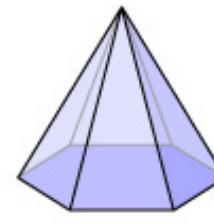
- 4)  Sphere

Pryamid

- A pyramid is a three-dimensional shape.
- It has a polygonal base.
- It has flat triangular faces.
- It is formed by connecting the bases to an apex (one Vertex).

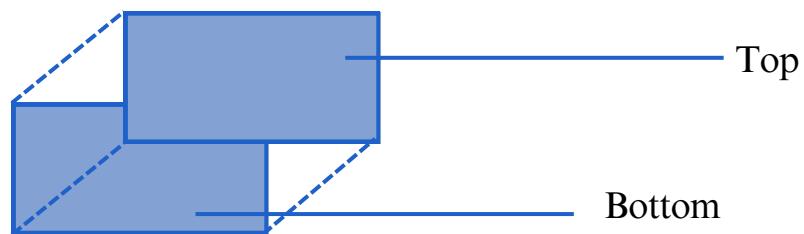
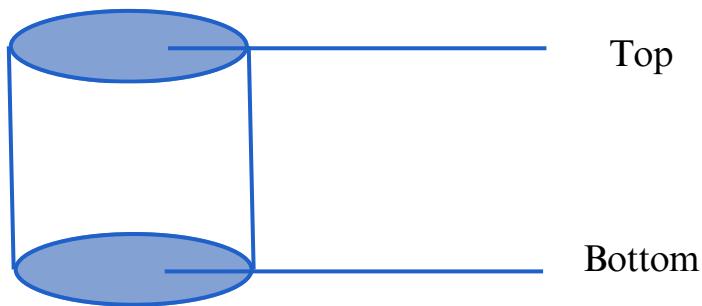
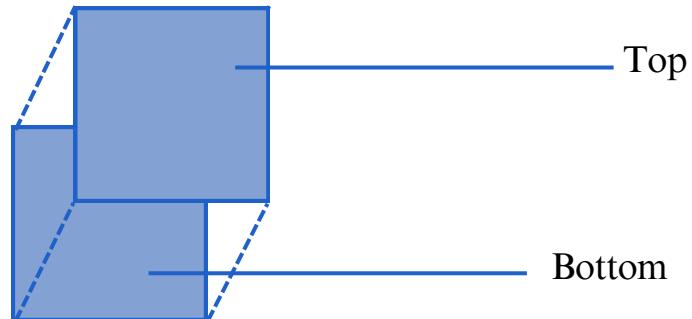
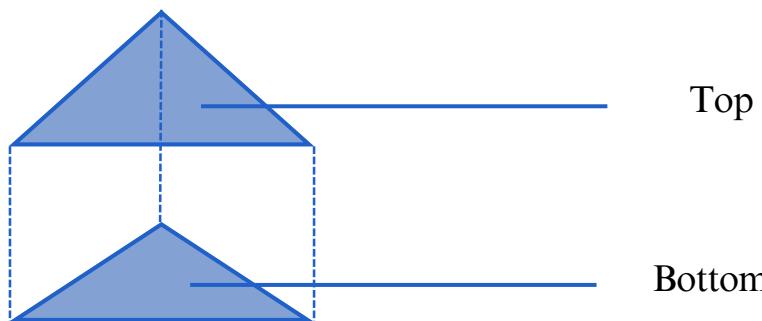


Types of Pyramids

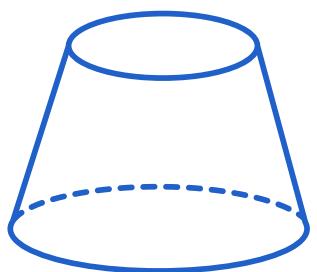
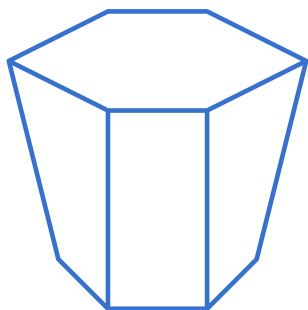
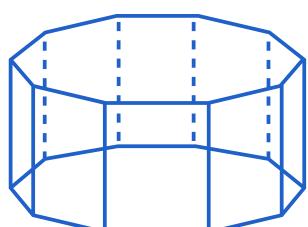
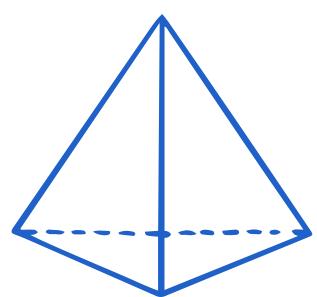
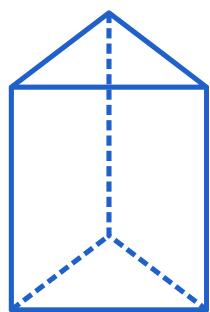
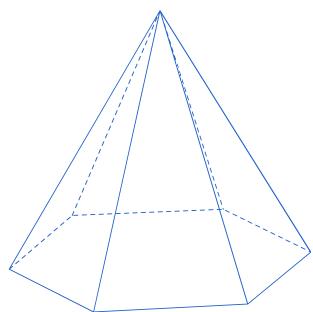
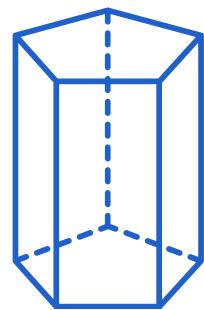
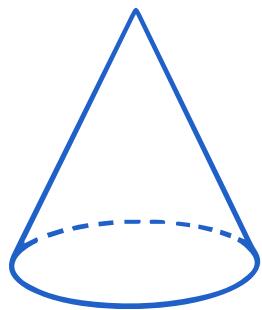
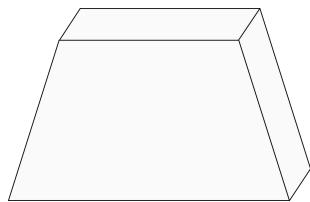
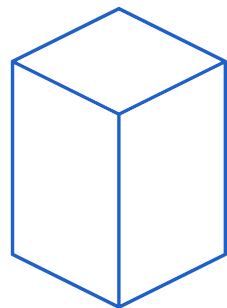
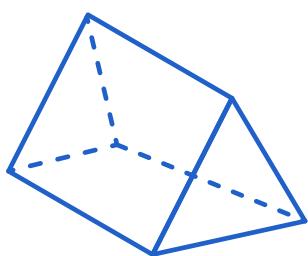
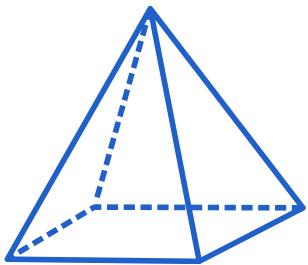
Triangular	Square	Rectangular	Pentagonal	Hexagonal
 4 Faces 4 Vertices 6 Edges	 5 Faces 5 Vertices 8 Edges	 5 Faces 5 Vertices 8 Edges	 6 Faces 6 Vertices 10 Edges	 7 Faces 7 Vertices 12 Edges

PRISMS

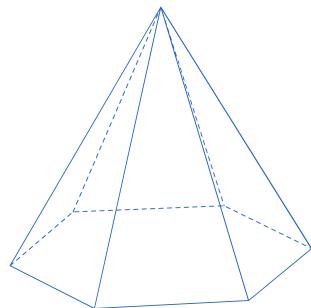
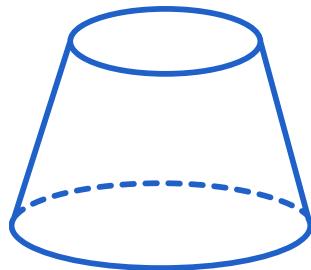
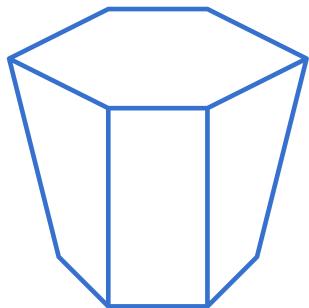
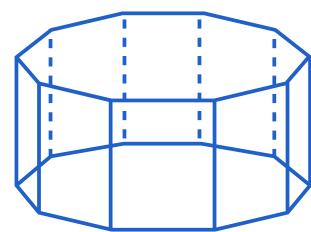
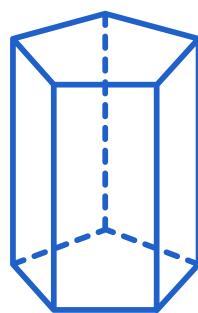
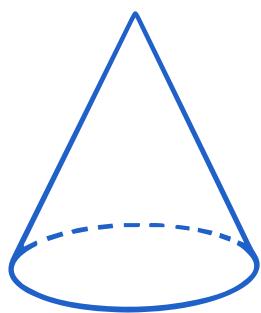
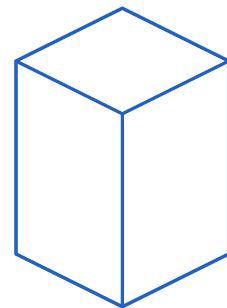
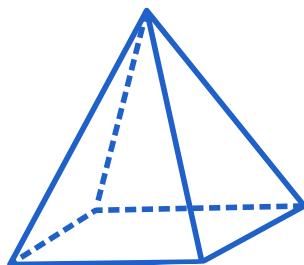
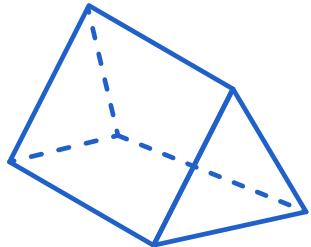
- It is a Three-Dimensional solid object.
- In a prism two ends (top & bottom) are identical.
- It is the combination of the flat faces, identical bases and equal cross-sections.
- The faces of the prism are parallelograms or rectangular (without the base).



Que1. Color the prisms in blue and pyramids in red

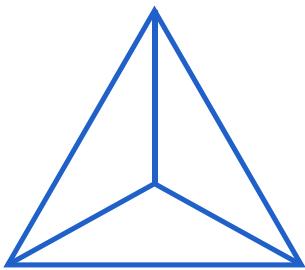


Que2. Classify the prisms and pyramids.



Que3. Complete the table:

1)

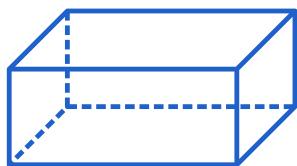


Faces =

Edges =

Vertices =

2)

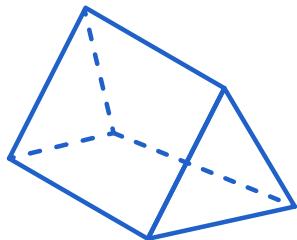


Faces =

Edges =

Vertices =

3)

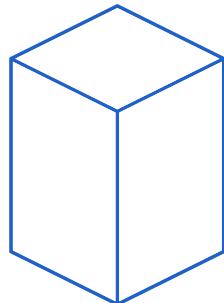


Faces =

Edges =

Vertices =

4)

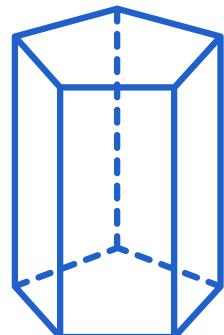


Faces =

Edges =

Vertices =

5)

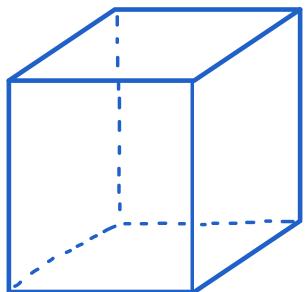


Faces =

Edges =

Vertices =

6)

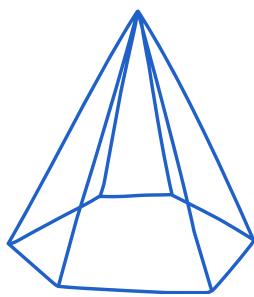


Faces =

Edges =

Vertices =

7)



Faces =

Edges =

Vertices =

8)

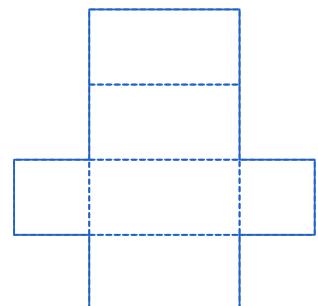
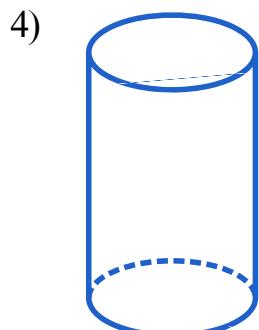
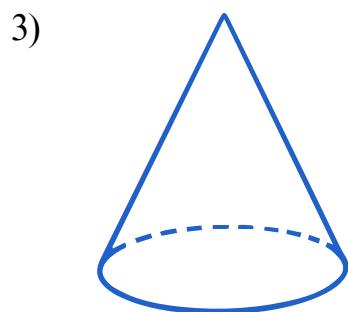
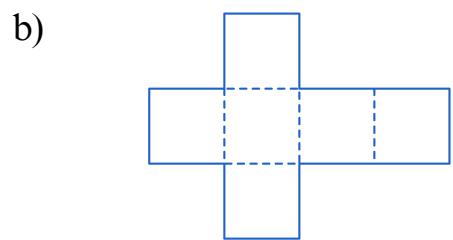
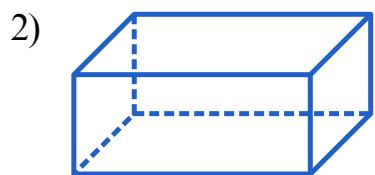
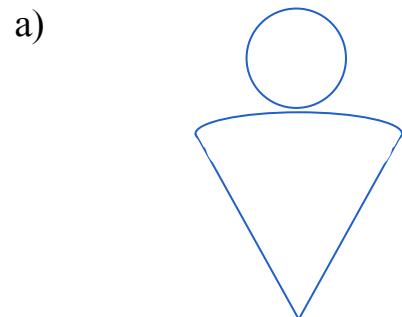
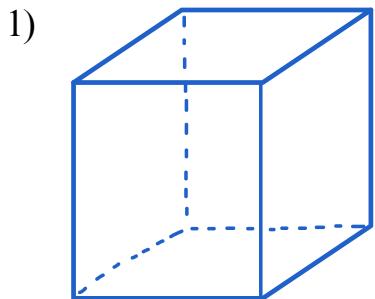


Faces =

Edges =

Vertices =

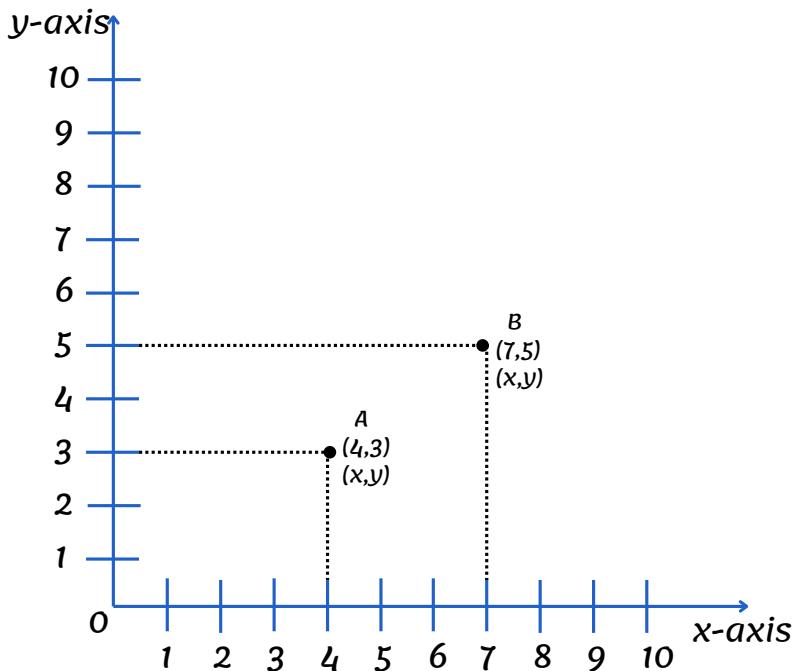
Que3. Match the nets with appropriate solids:



Chapter 9

CO-ORDINATE SYSTEM

9.1 Finding Locations



How to write Ordered Pair:

FIRST : We need to see the number on x -axis

SECOND : Then we need to look at the number on y -axis

ORDERED PAIR : (x, y)

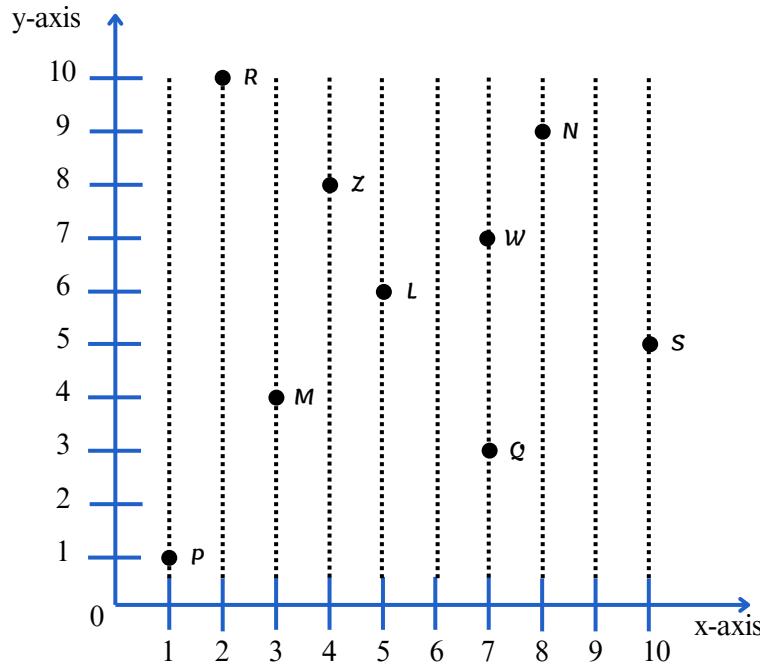
A (4, 3)

B (7, 5)

- The x -axis runs on a **HORIZONTAL LINE**.
- The y -axis on the **VERTICAL LINE**.

9.2. ORDERED PAIR

Que1. Look at the given grid and find the name of the points for each ordered pair.



1) $(10, 5)$ _____

6) $(2, 4)$ _____

2) $(5, 6)$ _____

7) $(7, 7)$ _____

3) $(1, 1)$ _____

8) $(2, 10)$ _____

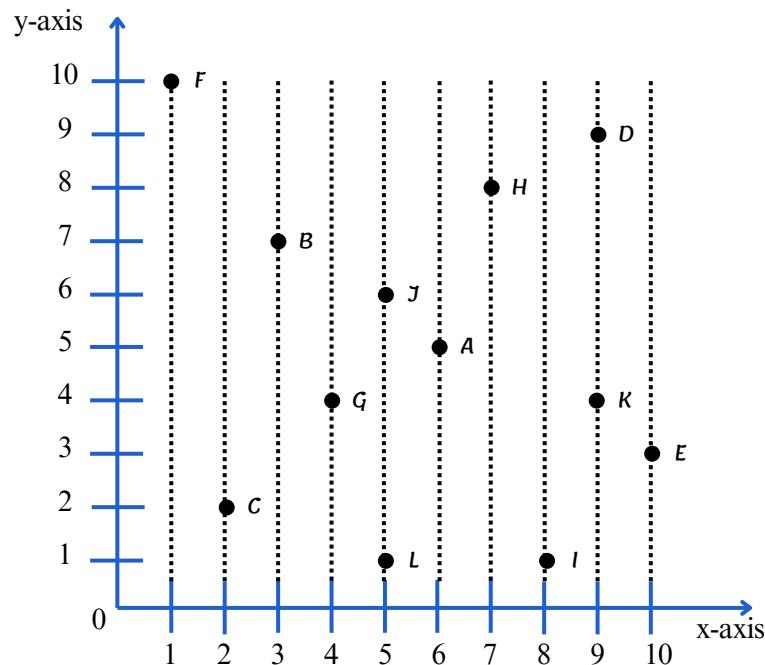
4) $(7, 3)$ _____

9) $(4, 2)$ _____

5) $(8, 9)$ _____

10) $(3, 8)$ _____

Que2. Look at the given grid and find the name of the points for each ordered pair.



A _____

B _____

C _____

D _____

E _____

F _____

G _____

H _____

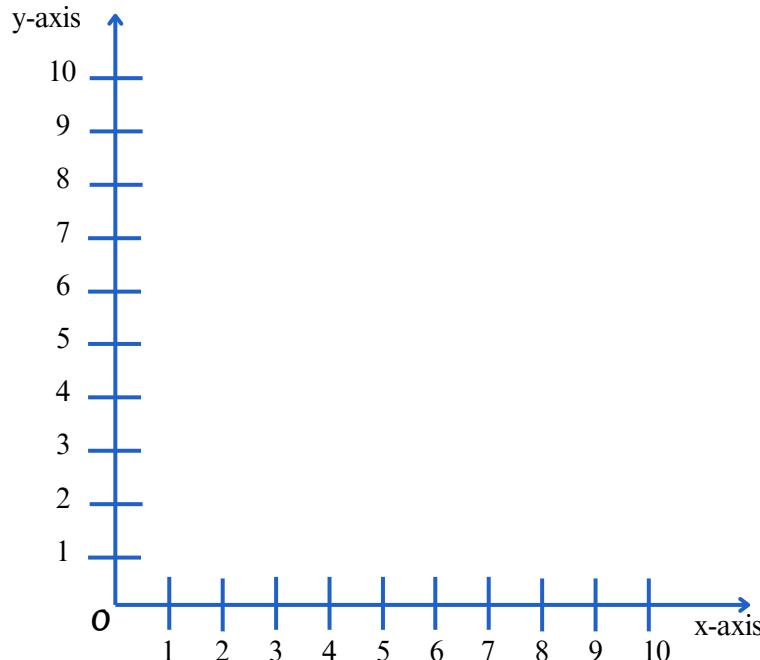
I _____

J _____

K _____

L _____

Que3. Look at the given grid and find the name of the points for each ordered pair.



T(4, 2)

I(8, 3)

G(1, 7)

E(5, 6)

R(2, 8)

Chapter 10

PROBABILITY

10.1. Possible Outcome



The coin is tossed

POSSIBLE OUTCOMES:

Head, Tails



POSSIBLE OUTCOMES:



Que1. List the possible outcomes of each experiment:



- 1) If the dice is rolled

POSSIBLE OUTCOMES:

_____ , _____ , _____ , _____ , _____ , _____

2)

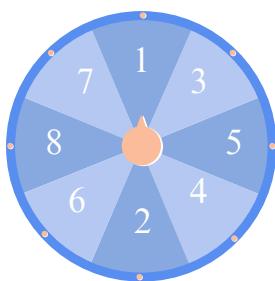
P	Q	R	S	Q	S	R
---	---	---	---	---	---	---

If a card is picked

POSSIBLE OUTCOMES:

_____.

3)

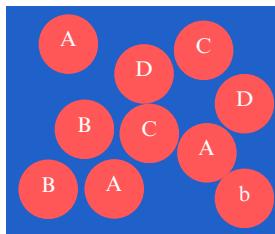


If the spinner is spun,

POSSIBLE OUTCOMES:

_____.

4)



If a ball is drawn from the box

POSSIBLE OUTCOMES:

_____.

10.2. Possible outcome with the coin

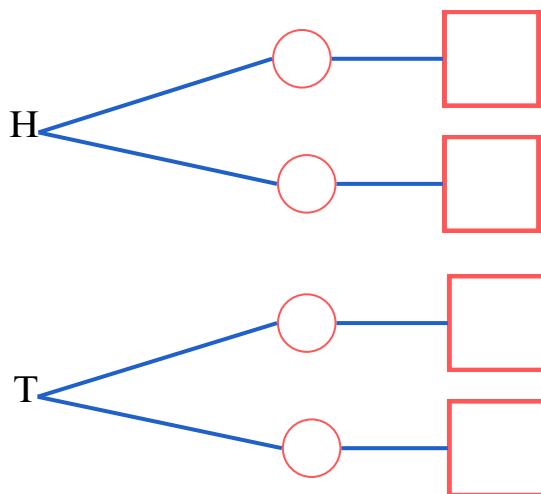
A girl is playing with 2 coins. She tosses them both at the same time.

Que1. Tick the possible outcomes:

- A 1 Head and 1 Tail
- B 2 Tails
- C 2 Heads
- D 2 Heads and 1 Tail

Que2. Draw a tree diagram to show all the possible outcomes of the experiment:

POSSIBLE OUTCOMES:



Que3. What is the possibility of getting:

1) 2 Tails?

A $\frac{1}{2}$

B $\frac{1}{3}$

C $\frac{1}{4}$

D $\frac{4}{1}$

2) 2 Heads?

A $\frac{1}{2}$

B $\frac{1}{3}$

C $\frac{4}{1}$

D $\frac{1}{4}$



3) 1 Head and 1 Tail?

A $\frac{1}{2}$

B $\frac{1}{3}$

C $\frac{1}{4}$

D $\frac{3}{1}$

4) No Heads?

A $\frac{1}{2}$

B $\frac{1}{3}$

C $\frac{4}{1}$

D $\frac{1}{4}$

5) No Tails?

A $\frac{1}{2}$

B $\frac{1}{3}$

C $\frac{4}{1}$

D $\frac{1}{4}$

10.3. Finding probabilities

The probability can be represented as a FRACTION.

$$\text{Probability} = \frac{\text{Number of outcomes of an event}}{\text{Total number of outcomes.}}$$

E.g.



Probability of picking = $\frac{1}{6}$

Probability of picking = $\frac{2}{6} = \frac{1}{3}$

Probability of picking = $\frac{2}{6} = \frac{1}{3}$

Probability of picking = $\frac{1}{6}$

Que1. If a dice is rolled:

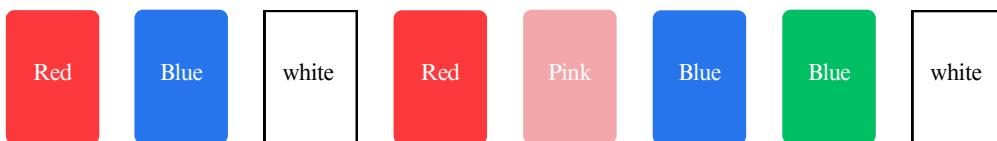


what is the probability of getting

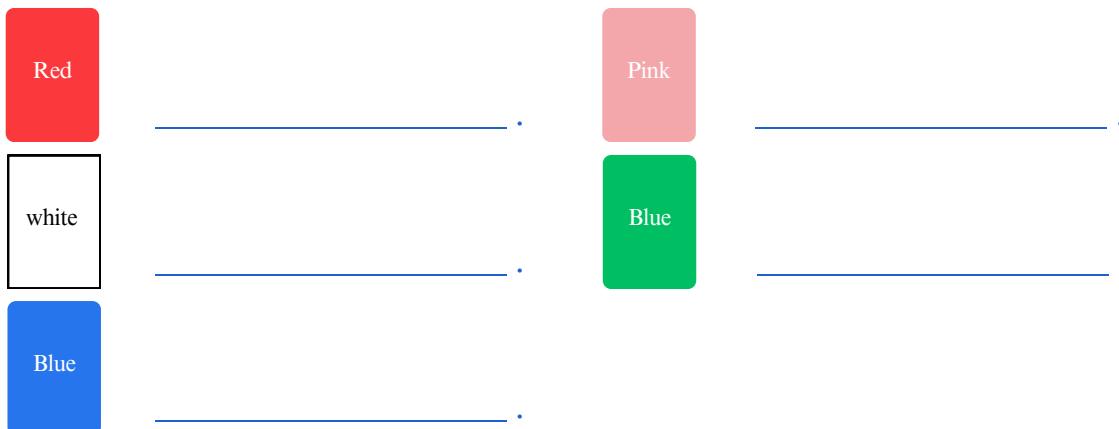
a) 2 _____ c) 4 _____

b) 3 _____ d) an even number _____

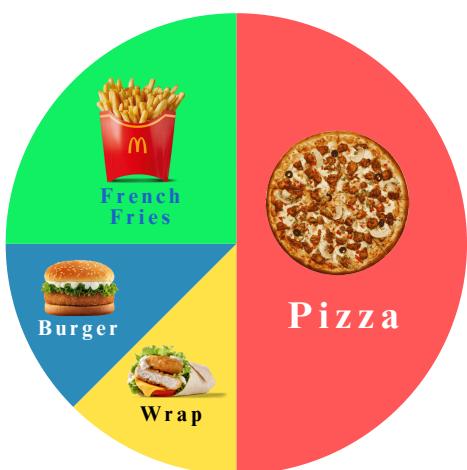
Que2. if a card is drawn:



What is the probability of getting



Que3. If a wheel is spun:



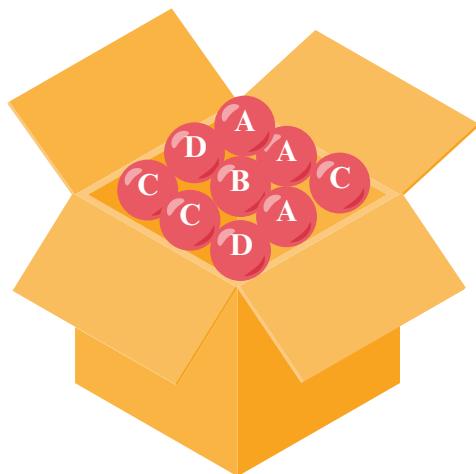
What is the probability of getting:

- a) _____.
- b) _____.
- c) _____.
- d) _____.
- e) _____.

Que4. if, a ball is drawn from the box

What is the probability of picking

- a) A _____.
- b) B _____.
- c) C _____.
- d) D _____.



Que5. Eliza has a deck of 7 cards that are red blue or green. The probability of picking

a green card is $\frac{3}{7}$

It is equally likely to pick a red card and a blue card.



What is the probability of picking a

a) Red Card: _____ .

b) Blue Card: _____ .

c) Card that is not Green: _____ .

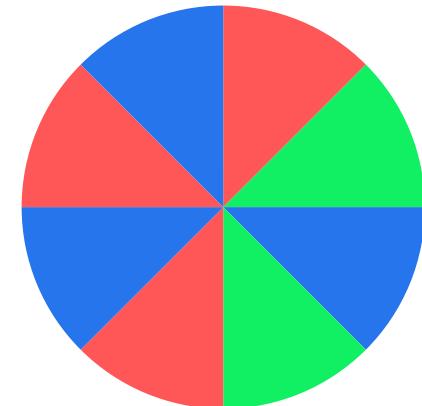
Que6. It's your Spinner

It has 8 sections that are either red, blue, green or yellow.

it is equally likely to get red and blue.

The probability of getting green and yellow are the same.

The probability of getting red is $\frac{3}{8}$.



★ Find the probability of getting

a) Green _____ .

$$\text{f) blue or green} = \frac{3}{6} = \frac{1}{2}$$

b) Blue _____ .

c) Yellow _____ .

d) not red _____ .

e) not green _____ .

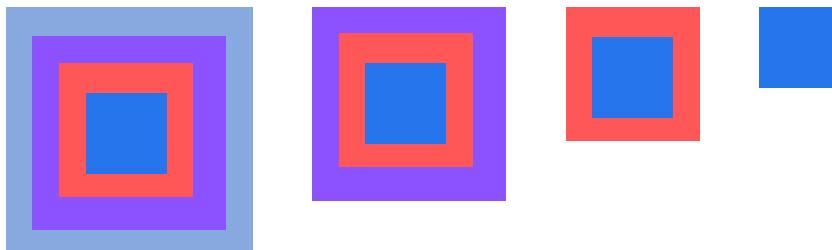
Chapter 11

PATTERNING

11.1. Patterns (Types)

- ★ A pattern can be numeric or geometric.
- ★ It can also be growing or shrinking.

E.g.



Numeric pattern

Geometric pattern

Growing pattern

Shrinking pattern

E.g. 3 , 6 , 9 , 12 ,

Numeric pattern.

or

Geometric pattern

Growing pattern

or

Shrinking pattern

Numeric
↓ mostly
related to numer
/ Alphabets

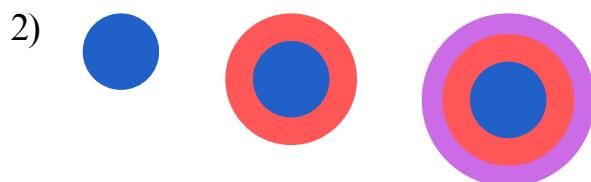
Geometric
↓ mostly
related to shapes

Que1. Draw the next pattern; also tick the correct pattern.



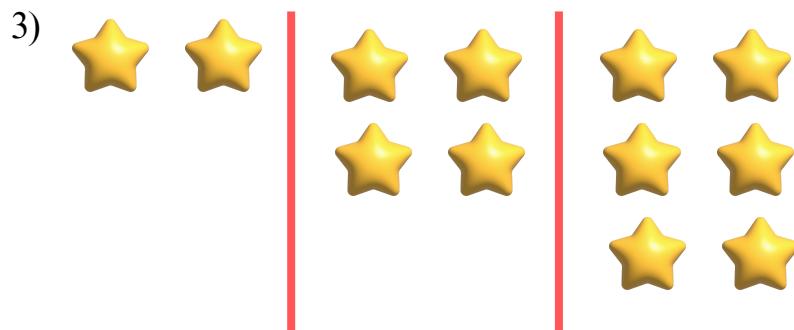
Growing pattern

Shrinking pattern



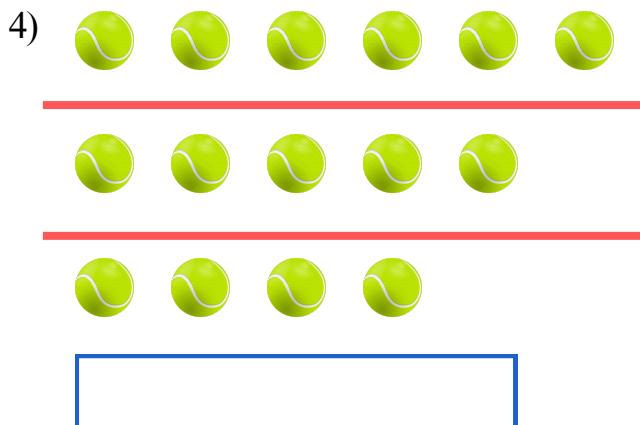
Growing pattern

Shrinking pattern



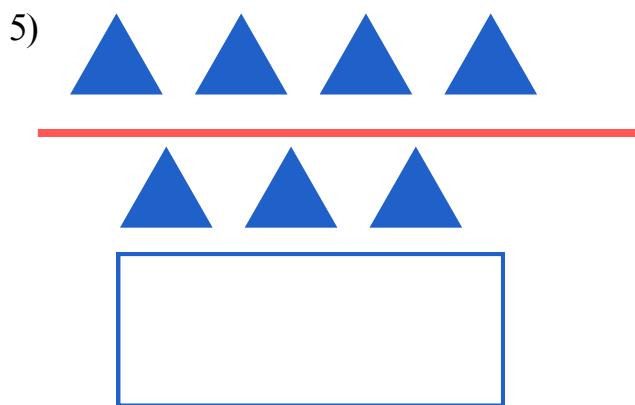
Growing pattern

Shrinking pattern



Growing pattern

Shrinking pattern



Growing pattern

Shrinking pattern

Que2. numbers to complete the pattern. also identify whether it is a growing / shrinking pattern

1) $5, 10, 15, 20, \underline{\quad}, \underline{\quad}$.

_____ Pattern.

4) $1, 2, 5, 14, \underline{\quad}, \underline{\quad}$.

_____ Pattern.

2) $20, 18, 16, 14, \underline{\quad}, \underline{\quad}$.

_____ Pattern.

5) $30, 25, 26, 21, \underline{\quad}, \underline{\quad}$.

_____ Pattern.

3) $2, 5, 11, 23, \underline{\quad}, \underline{\quad}$.

_____ Pattern.

6) $2, 4, 12, 14, 42, \underline{\quad}, \underline{\quad}$.

_____ Pattern.



7) $10, 20, 30, 40, \underline{\quad}, \underline{\quad}$.

_____ Pattern.

9) $243, 81, 27, \underline{\quad}, \underline{\quad}$.

_____ Pattern.

8) $64, 49, 36, 25, \underline{\quad}, \underline{\quad}$.

_____ Pattern.

10) $2, 5, 8, 11, 14, \underline{\quad}, \underline{\quad}$.

_____ Pattern.

11.2. Pattern Rule

Que1. Check the pattern rule and tick the suitable one.

1) $10, 5, 8, 4, 7$

Pattern Rule:

- A Start at 10: Divide by 2. Then add 3.
- B Start at 10: Subtract 5. Then add 3.

2) $2, 5, 10, 13, 26$

Pattern Rule:

- A Start at 2. Add 3. Then multiply by 2.
- B Start at 2. Add 3. Then add 5.



Que2. Extend the pattern by writing the next numbers and write its pattern rule:

1) 5, 8, 7, 10, 9, _____, _____ .

My Pattern Rule:

2) 1, 3, 9, 27, 81, _____, _____ .

My Pattern Rule:

3) 1, 4, 10, 22, 46, _____, _____ .

My Pattern Rule:

4) 4, 5, 7, 11, 19, _____, _____ .

My Pattern Rule:

5) 25, 26, 20, 21, _____, _____ .

My Pattern Rule:



Que3. Match the correct pattern with its rule.

- | | |
|-------------------------|---|
| 1) 16, 17, 51, 52, 156. | • Start at 16. Subtract 5. Then multiply by 2. |
| 2) 16, 48, 24, 72, 36. | • Start at 16. Divide by 2. Then add 2. |
| 3) 16, 8, 10, 5, 7. | • Start at 16. Add 1. Then multiply by 3. |
| 4) 16, 11, 22, 17, 34. | • Start at 16. Multiply by 3. Then divide by 2. |

Chapter 12

MONEY

12.1. Read and write the amount

Que1. Look at the picture and write the amount you have calculated:

1)



Amount: _____ \$.

2)



Amount: \$ _____ ¢ _____ .

3)



Amount: \$ _____ ¢ _____.

4)



Amount: \$ _____ ¢ _____.

\$ / ¢	Notes
\$ 100	1
\$ 50	3
¢ 25	3
¢ 10	2
¢ 5	4

\$ / ¢	Notes
\$ 100	4
\$ 50	5
\$ 20	1
\$ 10	2
\$ 1	3
¢ 10	3
¢ 5	3

12.2. Addition

$$1) \quad \begin{array}{r} \$63.56 \\ +\$38.18 \\ \hline \end{array}$$

$$2) \quad \begin{array}{r} \$54.21 \\ +\$39.89 \\ \hline \end{array}$$

$$3) \quad \begin{array}{r} \$68.57 \\ +\$87.12 \\ \hline \end{array}$$

$$4) \quad \begin{array}{r} \$90.73 \\ +\$66.13 \\ \hline \end{array}$$

$$5) \quad \begin{array}{r} \$77.35 \\ +\$40.69 \\ \hline \end{array}$$

$$6) \quad \begin{array}{r} \$81.42 \\ +\$11.43 \\ \hline \end{array}$$

$$7) \quad \begin{array}{r} \$13.74 \\ +\$96.34 \\ \hline \end{array}$$

$$8) \quad \begin{array}{r} \$27.86 \\ +\$14.24 \\ \hline \end{array}$$

$$9) \quad \begin{array}{r} \$13.74 \\ +\$96.34 \\ \hline \end{array}$$



Que1. The cost of one trouser is \$ 24.56 and the cost of one jacket is \$ 56.39.
 Uncle John buys two jackets and two trousers. what is the total amount he has to pay for his purchase?



Que2. Eliza buys two skirts and four tops what is her total amount she has to pay for her purchase?

12.3. Subtraction

$$\begin{array}{r} \$86.49 \\ - \$45.27 \\ \hline \end{array}$$

$$\begin{array}{r} \$67.56 \\ - \$31.12 \\ \hline \end{array}$$

$$\begin{array}{r} \$67.75 \\ - \$43.86 \\ \hline \end{array}$$

$$\begin{array}{r} \$35.29 \\ - \$17.12 \\ \hline \end{array}$$

$$\begin{array}{r} \$58.81 \\ - \$55.69 \\ \hline \end{array}$$

$$\begin{array}{r} \$76.89 \\ - \$72.55 \\ \hline \end{array}$$

$$\begin{array}{r} \$37.56 \\ - \$12.34 \\ \hline \end{array}$$

$$\begin{array}{r} \$80.58 \\ - \$28.56 \\ \hline \end{array}$$

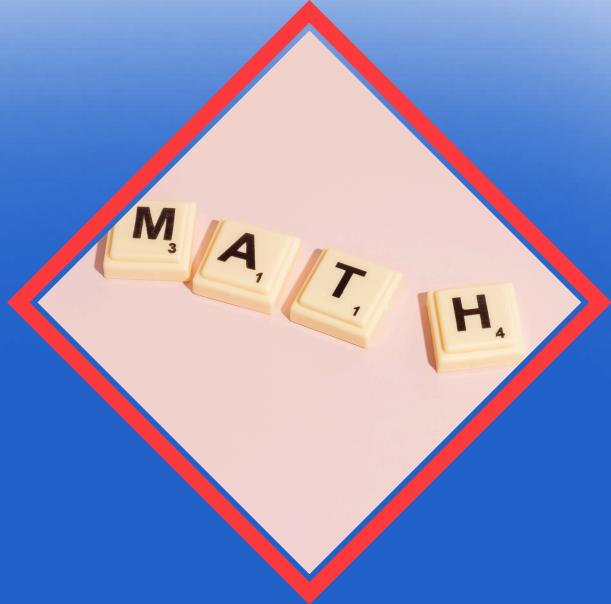
$$\begin{array}{r} \$72.34 \\ - \$56.27 \\ \hline \end{array}$$



Que1. Mr. Joseph buys a dining table with four chairs. what is the total amount he pays to the shopkeeper?

Que2. If Miss Donald purchases one ottoman and two cabinets from the shopkeeper and pays \$500. How much money did Miss Donald get back?

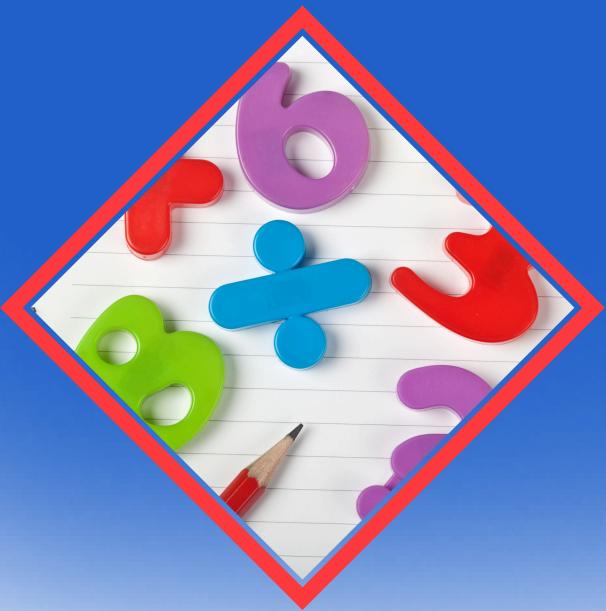
Que3. Milly bought one dining table , two ottomans and two chairs. But , She has only \$500. How much money is less to pay to the shopkeeper?



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