P.3 TERM TWO MATHEMATICS LESSON NOTES

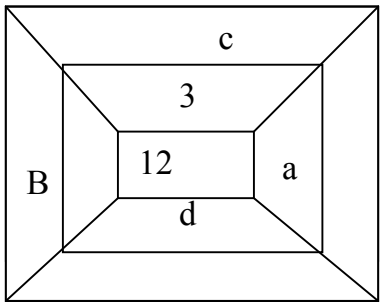
TOPIC NUMBER PATTERNS AND SEQUENCES

Period 1

Content

2nd Finding the missing numbers

1. **Examples:**



Find the value of a and c

a+7=12

a=12-7

a=5

c+3=12

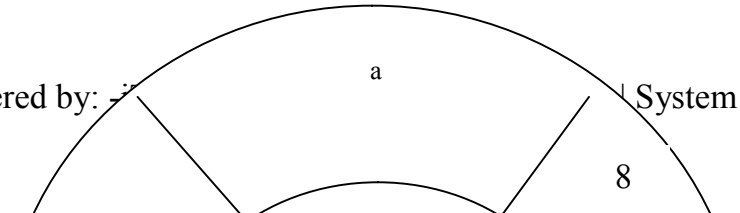
c=12-3

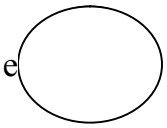
c=9

TRIAL NUMBERS

A. Find the value of
   b ----------
   d……..

   Exercise
   Find the missing numbers





17

12

b

10

d

a ……..

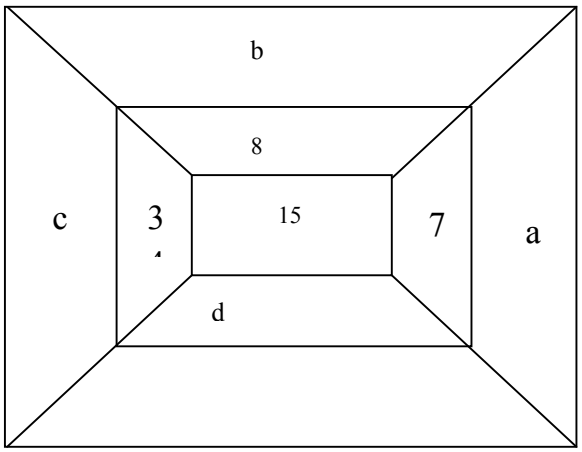
b ……..

c ……..

d ……..

e ……..

2.



a ……..

b ……..

c ……..

d ……..

e ……..

Ref pg: 81

Period 3 and 4

Find the missing numbers

Example

☐ +2=9 (2) x+4=5

□ =9-2 x=5- 4

□ =7 x=1

Trial numbers

1. □ +6=15 2. Y+7=20

Exercise

Find the missing numbers

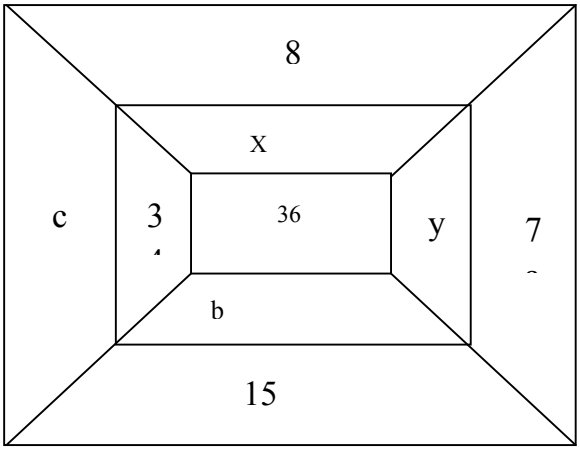
1 □ +2=5 3. □ +9=14

2 □ +12=18 4 □ +5=12

5 x+5=10 6 m+6=17

PERIOD 5AND 6

CONTENT



X=25-8

X=17

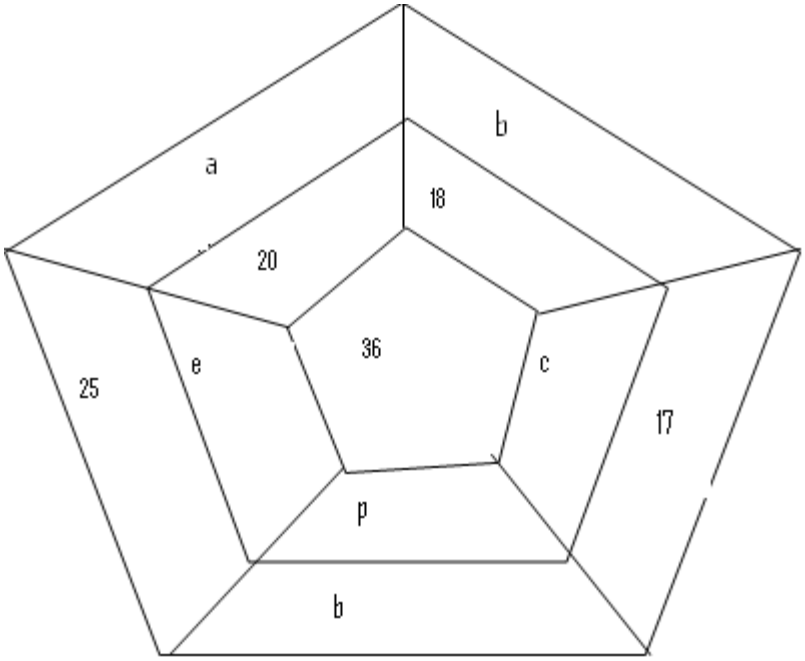
Y=25-7

Y=18

TRIAL NUMBER

Find the value of :

a…….. d …… exercise



Find the value of

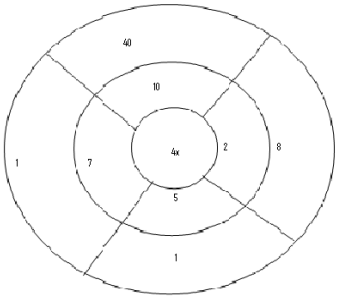
a…… b……. c…….. d…….

ref:pg81

Period 7&8

Content

Finding missing numbers



4x-2=8

4x10=40

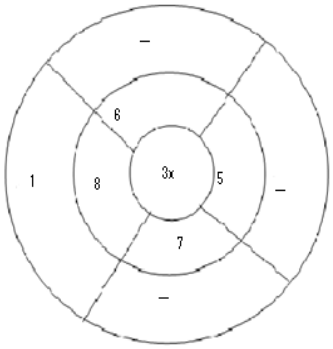
Trial numbers

4x5=…….

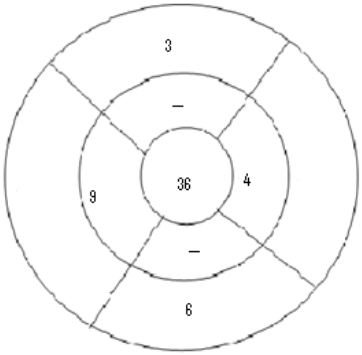
4x7=…….

Exercise: find the missing numbers in the wheel

1.



2.



Ref: mk ppbk3pg:82

Work2: period 9&10.pg84

Finding the missing number

3x4=12

3x4=12

3x□ =12

Solution

3÷3x □=12÷3

□=4

Trial numbers

□ X3=9

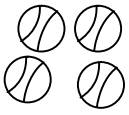
□ X2=8

Exercise

i. 2x5 = □
ii. 3x □=15
iii. 4x □ =8
iv. □ x7=14
v. □ X6=12

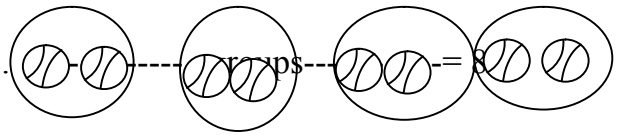
Work 3 period 1 pg 84
Counting in twos
Example


1group of 2 =2

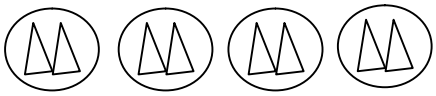

Two groups of 2=4

Trial numbers

1.  ---------- Groups of ---------- =6

2. 

Exercise

1.  = ------- groups of---------- =

2. groups of ---------- =
3. groups of ---------- =

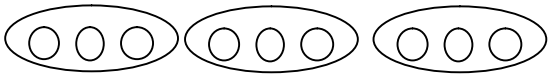
4. ○○ ○○ ○○ ○○ ○○ ○ ○ = --------- groups of---------- =

Work 3 period 2&3 pg 84

Counting in three and four(s)

1threes =3

2threes =3+3=6



Example 2

1 fours = 4

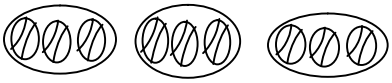
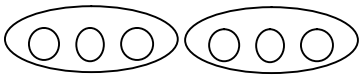
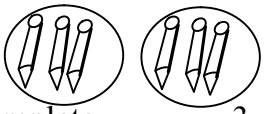
2 fours 4+4=8

= Groups of fours =8

Trial numbers

1.  = ------- Group of ------- = -------
2. = ------- groups of ------- = -----

Exercise

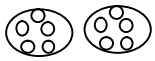
1.  = ------ group of ----- = -------
2.  = ------ group of ----- = -------
3.  = ------ group of ----- = -------
4. Complete 3, 6, 9,12, ____, ___
5. Complete 0, 4, 8, ____, ____

Work period 4, 5, and 6

Counting in fives and tens

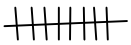
a. 1 fives = 5

2 fives = 5+5=10

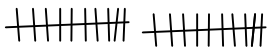
 =5+5=10

Example2

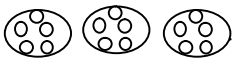
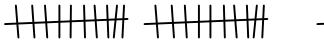
1 tens =10

 = 10

2 Tens == 10+10=20

 = 2groups of tens =20

Exercise

1.  = ------ groups of ------ = -------
2.  = ------- group -------- = --------
3. A kello has five figures in one hand, how many figure does she have in 2 hands?
4. Complete 0, 5, 10,_____,20, _____
5.  --------- groups -------- =----------
6. Fill in the missing numbers 0, 10, -----, 30, -----, 50, ----------

0+2 =2

2+2=4

4+2=6

6+2= ⑧

Work 3 period 7&8pg-89

2. 1,2,3,4, 5

Finding more on missing numbers

Example :

1 . 0, 2, 4, 6, 8

Trial numbers

0, 3, 6,9, ------

Exercise

Fin the missing numbers

1. 0,5,10, ---------,20, -------
2. 10, 20, 30 ------, ----------
3. 4, 8, 12, ------
4. 1, 3, 5, ------9, -----

Work period 9&10 pg 87

Addition in magic square

7	0	5
b	4	a
3	c	1

NB first find the sum of 3 squares in line

7+0+5=12

a+5+1=12

a+6=12

a=6

b+10+7=12

b+17=12

b=2

Trial numbers

Find the value of c

Exercise

Find the missing numbers

4	y	5
2	4	6
3	8	x

X= ----------

Y= ----------

2	9	a
7	b	3
6	c	d

a------ b ------ c ------- d ------

Work period 1 and 2 pg.89

Multiplying by two, threes, and fours

Example

= 2x2=4

Counting numbers

e.g 1, 2, 3, 4, 5, 6.---------

whole numbers: these are numbers without fraction

0, 2, 3, 4, ----------

TRIAL NUMBERS

A. list all the counting numbers less than 10
B. Write down the whole numbers from 0-9.

i. Exercise
ii. i. list down all the whole the numbers less than 15
iii. list the counting numbers between the 5&10
iv. set A={whole numbers less than 20}
v. B= { all counting numbers less than5}

vi.

a. Write all members of set A
b. List down all members of set B
c. How many members are in set B
d. Find set AnB
e. which set has more members

b. How many elements are in set p

4. Set A { all; even numbers between 2 and 10 }

i. List down all elements of set A
ii. how many members are in set A

WORK 4 PERIOD 6&7

Odd numbers and even numbers

Odd numbers: are numbers when divided by you getting 1 as a reminder.

Even numbers are numbers which are divisible by two.

0, 2, 4, 6, 8, ----------

Trial numbers

a. List down all even numbers from 6-14.
b. List the odd numbers from 11-21

Exercise

1. List down all the odd numbers between 6 and 13
2. List down all even numbers between 10and 20
3. Set P={ all odd numbers less than 10 }

a. List down all elements of set p

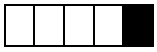
TOPIC 2 FRACTIONS
WORK4 PERIOD 8-9 PG 95

Naming fractions

	Write	**read**
	1	one whole or awhole
	½	one half or a half

1/₃ one third or a third

¼ one quarter or a quarter

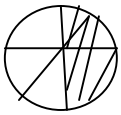


1/5 one fifth or a fifth

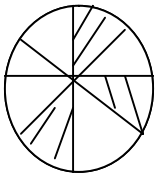
1/6 one sixth or a sixth

Examples

Write and the following fractions



2/6 two sixths



⅜ Three eighths

Trial numbers

Exercise

Write the following fractions in words

½ = ----------

-

⅔ = ----------

1/10 =----------

3/5 = ----------

2/4 = ----------

-

Work period 10 pg 96

Drawing and shading fractions

Example

1/3 =

Example 2

3/5 =

Exercise

Draw and shade the following fractions

1. ¼ (2.) $^{3}/_{7}$ (3) $^{4}/_{10}$

4 $^{2}/_{5}$ (5)

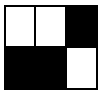
Work 5 period 2 pg 97-98]

Numbering shaded and un shaded fraction

Which fraction is shaded?

Example 2

Name the



un shaded fraction

Trial number

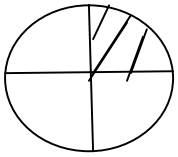
1.

Name the un shaded fraction

2.

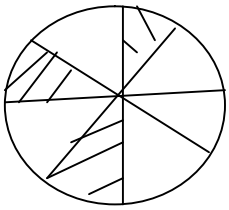
Name the shaded fraction

Exercise

1. 

Which fraction is un shaded

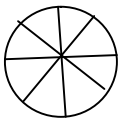
Name the un shaded fraction



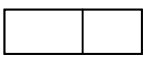
a. Whish fraction is shaded
b. Which fraction is un shaded

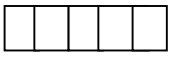
Work 5 period 3 pg 98
Shading fraction s
Example
Shade $^{2}/_{5}$ 

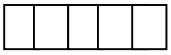
Trial number

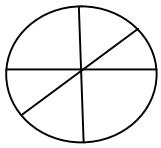
Shade $^{3}/_{8}$ 

Exercise

½ 

$^{2}/_{5}$ 

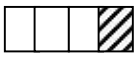
$^{4}/_{5}$ 

$^{1}/_{6}$ 

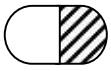
Wok 5 period 4 pg 99

Comparing fractions using bigger than, smaller than

Example
\ ½ is bigger than ¼

$^{1}/_{3}$ is smaller than ½

Exercise
Compare the following fraction using bigger and smaller
½ ---------- 1
$^{1}/_{3}$---------- ¼
$^{1}/_{3}$ ---------- $^{1}/_{5}$

Work period 5 pg99-100
Comparing fraction using greater than and Less than
Example
½ is greater than $^{1}/_{3}$

¼ is less than ½

Exercise

Compare the following fractions using greater than and less than

$^1/_3$is ---------- ½

¼ is ---------- $^1/_5$

$^1/_{10}$is---------- $^1/_6$

Work 5 period 6 comparing fractions using >< or =

Example

¼ ____ < ____ $^1/_3$

Trial numbers

½ ---------- $^1/_3$

Exercise

1. $^2/_4$ ---------- ½
2. $^1/_3$ ---------- ¼
3. $^1/_5$ ---------- ½
4. $^1/_6$ ---------- $1/_{10}$

Trial number

I. $^2/_{10} + ^7/_7 =$

II. $^3/_5 + ^1/_5 =$

Exercise

1. $^3/_{10} + ^4/_{10}$=-------
2. $^4/_9 + ^3/_9$ = ---------
3. $^7/_{15} + ^6/_{15}$ = --------
4. $^9/_{20} + ^5/_{20}$ = -------
5. $^3/_8 + ^4/_8$ = ----------

Work 5 period 9 and 10

Word problems involving addition in fraction

Find the sum of $^7/_{11}$ and $^2/_{11}$

1. $^7/_{11} + ^2/_{11} = ^9/_{11}$

2. Jane dug $^3/_{10}$ on Monday and $^2/_{10}$ on Tuesday. What fraction did she dig

   Monday $= ^3/_{10}$

   Tuesday $= ^2/_{10}$

   $^3/_{10} + ^2/_{10} = ^{3+2}/_{10} = ^5/_{10}$

Trial number

Monica ate $^2/_5$ of her cake in the morning and $^1/_5$ in the evening. What fraction of the cake did she eat altogether?

Work 5 period 7 pg 101-103

Addition of fractions

Examples

1. Add $^2/_6 + ^3/_6 = \frac{2+3}{6}$
2. Add $^1/_7 + ^2/_7 = \frac{1+2}{} = ^3/_7$

Exercise

1. Nyaweeka ate $^3/_{15}$ of her sugarcane in the afternoon and $^{10}/_{15}$ in the evening which fraction of the sugarcane did she altogether

2. Find the sum of $^{7}/_{12}$ and $^{4}/_{12}$
3. I walked $^{4}/_{9}$ of the journey and ran $^{3}/_{9}$ of it. What fraction did I cover altogether

Work 6period 1 & 2 pg 105-107

Subtraction of fractions

a. $^{5}/_{9}-^{3}/_{9}=^{5-3}/_{9}=^{2}/_{9}$
b. $^{6}/_{10}-5/_{6}=^{6-5}/_{10}=^{1}/_{10}$

Exercise

1. $^{3}/_{7}-^{2}/_{7}=$
2. $^{8}/_{20}-^{5}/_{20}=$
3. $^{10}/_{1/5}-^{7}/_{15}=$
4. $^{13}/_{25}-^{8}/_{25}=$

Word problems involving subtraction
On fraction
Example

1. A boy had 5/6 of the cake. Heat 2/6. What fraction remained
   $^{5}/_{6}-^{2}/_{6}=^{5}-^{2}/_{6}=^{3}/_{6}$

Example 2

A girl had an orange. She gave away 34/4 of it. What fraction remained?
4/4 -3/4= ¼

Exercise

1. John painted $^{7}/_{10}$ of his house on Monday. What fraction of his house has not been painted?
2. A bowl was $^{11}/_{12}$ full of sugar. I used $^{5}/_{12}$ what fraction remained what is the difference between $^{5}/_{7}$ and $^{3}/_{7}$
3. A garden has 8 equal parts. 3parts out of 8 are planted with maize what fraction remained?

Multiplication of fractions

½ x ½

$\frac{NXN}{DXD}=\frac{1X1}{2X2}=\frac{1}{2}$

$\frac{1X1}{2X2}=¼$

TRIAL NUMBERS
Multiply $^{2}/_{3}$ x $^{3}/_{5}$

Exercise

1. ¼ x ½
2. $^{3}/_{6}$ x $^{2}/_{6}$
3. $^{1}/_{3}$ x $^{2}/_{7}$
4. $^{2}/_{7}$ x $^{3}/_{6}$