**P.3 TERM TWO MATHEMATICS LESSON NOTES**
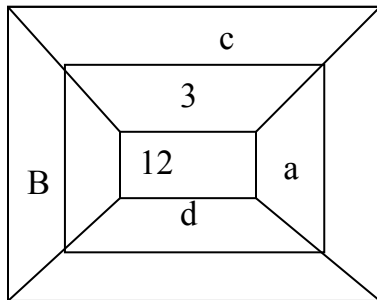
**TOPIC NUMBER PATTERNS AND SEQUENCES**

**Period 1**

**Content**

2nd Finding the missing numbers

1. **Examples:**



Find the value of a and c
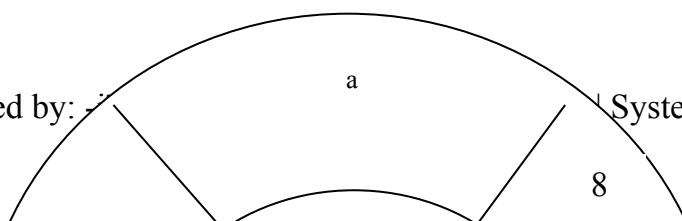
a+7=12

a=12-7

a=5

c+3=12

c=12-3

c=9

**TRIAL NUMBERS**

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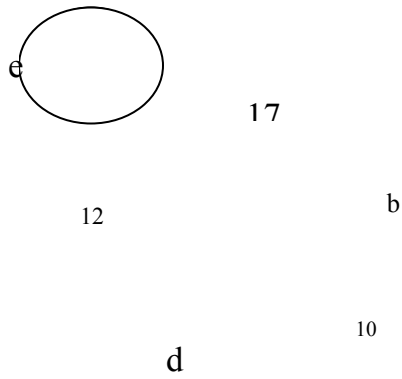       b ----------------
       d…………………..

      **Exercise**
      Find the missing numbers

e

17

12

b

10

d

a ……………..

b ……………..

c ……………..

d ……………..

e ……………..

2.

b

8

c   3   15   7   a

d

a ……………..

b ……………..

c ……………..

d ……………..

e ……………..

**Ref pg: 81**

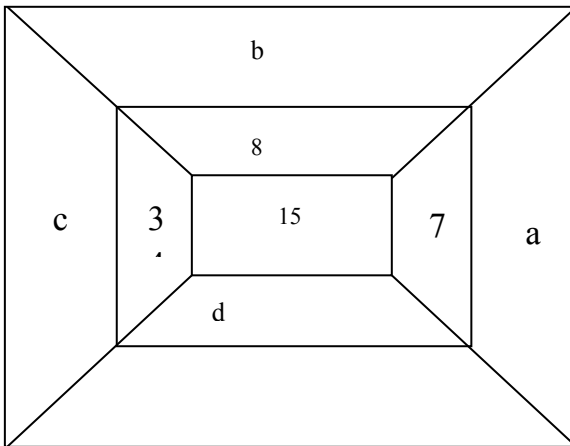**Period 3 and 4**

**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
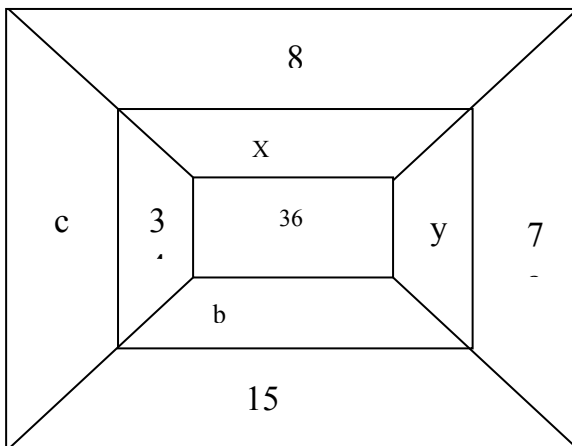
1    ☐ +2=5              3.   ☐ +9=14
2    ☐ +12=18            4    ☐ +5=12

5    x+5=10              6    m+6=17
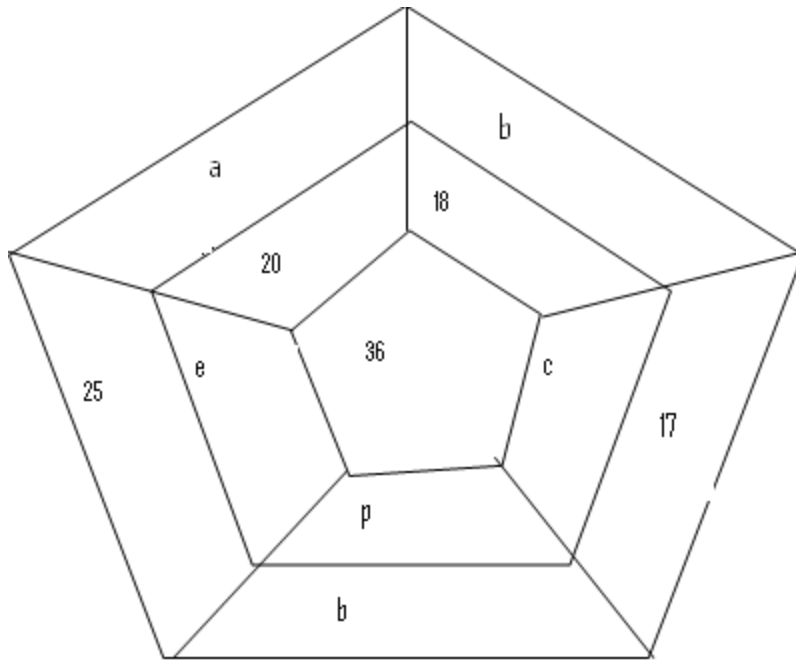
## PERIOD 5AND 6

## CONTENT



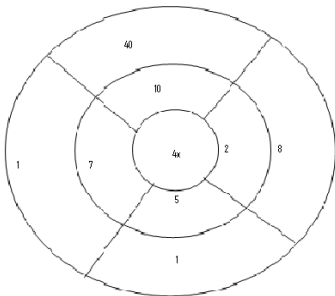X=25-8

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

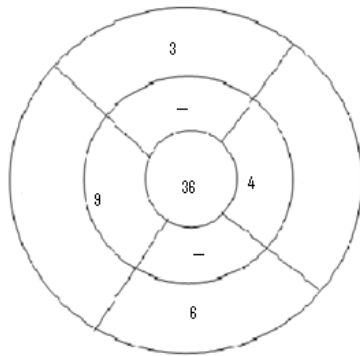**Trial numbers**
4x5=…………….
4x7=………………

**Exercise**: find the missing numbers in the wheel
   1.
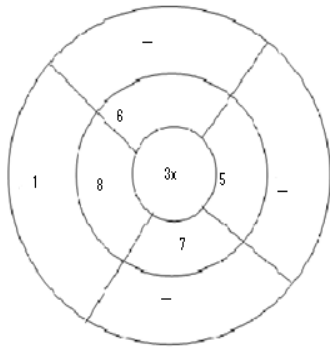
2.



**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. ----groups---- = 8

**Exercise**

1. = -------        groups of---------- =
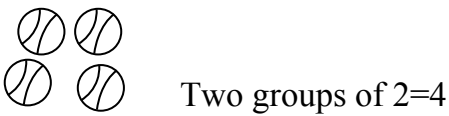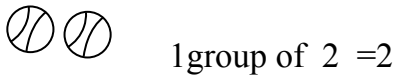
2. ○○   ○○ ○○  ○○ groups of ----------- =
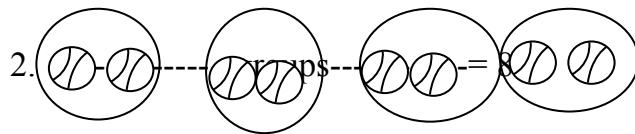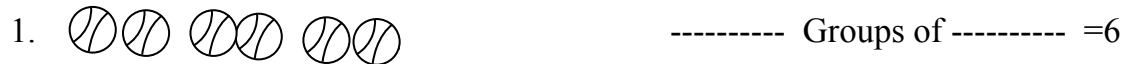
3. ○○----○○  groups○○--○○--○-○=
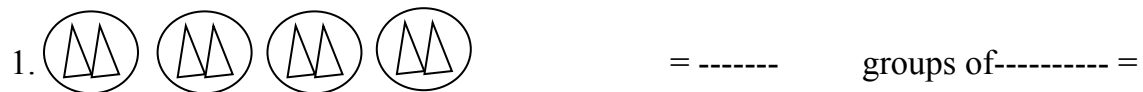
4.  OO  OO  OO  OO  OO  O O  = ---------  groups of------------- =

**Work 3 period 2&3 pg 84**

**Counting in three and four(s)**

1threes =3

2threes =3+3=6

Ⓞ Ⓞ Ⓞ   Ⓞ Ⓞ Ⓞ   Ⓞ Ⓞ Ⓞ
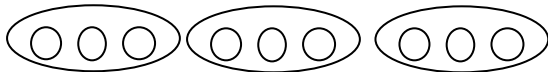
**Example 2**

1 fours  = 4

2 fours  4+4=8

Ⓞ Ⓞ Ⓞ Ⓞ   Ⓞ Ⓞ Ⓞ Ⓞ      = Groups of fours =8

**Trial numbers**
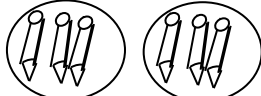
1.  Ⓞ Ⓞ Ⓞ   Ⓞ Ⓞ Ⓞ      = -------    Group of ------- = -------
2.  = -------   groups of ------- = -----
    Ⓞ Ⓞ Ⓞ Ⓞ   Ⓞ Ⓞ Ⓞ Ⓞ   Ⓞ Ⓞ Ⓞ Ⓞ

**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

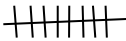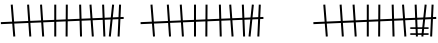╫╫╫╫╫ ╫╫╫╫╫        = 2groups of tens =20

**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**

**Finding more on missing numbers**

**Example :**

1 .  0, 2, 4, 6, 8

2.     1,2,3,4, 5

**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

a. List down all elements of set p
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 }

## TOPIC 2 FRACTIONS
## WORK4 PERIOD 8-9 PG 95

Naming fractions

| | Write | read |
|---|---|---|
| | 1 | one whole or awhole |
| | ½ | one half or a half |

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

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**

**Work period 10 pg 96**

**Drawing and shading fractions**
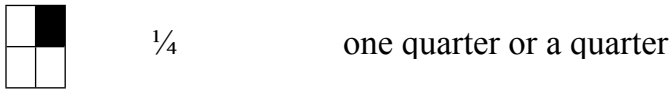
**Example**

1/3 =

Example 2

3/5 =
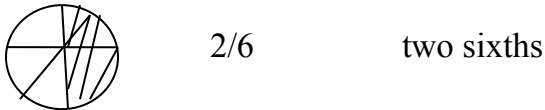
**Exercise**

**Draw and shade the following fractions**
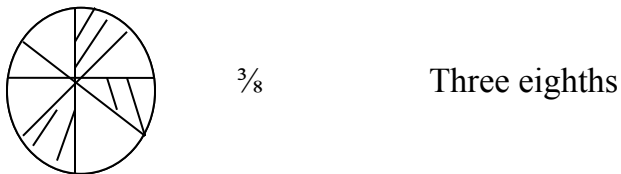
1. ¼    (2.) $^3/_7$    (3) $^4/_{10}$

4 $^2/_5$    (5)

**Work 5 period 2 pg 97-98]**

**Numbering shaded and un shaded fraction**

Which fraction is shaded?

**Exercise**

Write the following fractions in words

½ = ---------------------------------------------
-

⅔ = ---------------------------------------------

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

3/5 = ---------------------------------------------
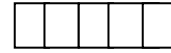
**Example 2**

Name the

un shaded fraction

**Trial number**

1.

Name the un shaded fraction

$^2/_5$

2.

Name the shaded fraction

$^4/_5$
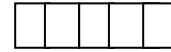
$^1/_6$
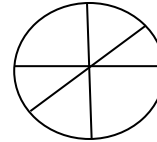
**Exercise**

1.

Which fraction is un shaded

**Wok 5 period 4 pg 99**

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**Comparing fractions using bigger than, smaller than**
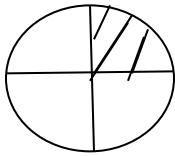
Name the un shaded fraction

**Example**
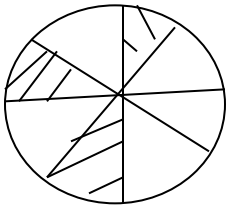
\ ½ is bigger than ¼

a. Whish fraction is shaded
b. Which fraction is un shaded
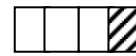
$^1/_3$ is smaller than ½
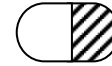
**Work 5 period 3 pg 98**
**Shading fraction s**
**Example**
Shade $^2/_5$

**Exercise**
Compare the following fraction using bigger and smaller

½ ------------------ 1

$^1/_3$---------------- ¼

$^1/_3$ ---------------- $^1/_5$

**Trial number**

Shade $^3/_8$

**Exercise**

½
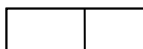
**Work period 5 pg99-100**
**Comparing fraction using greater than and Less than**
**Example**

½ is greater than ⅓



¼ is less than ½



**Exercise**

Compare the following fractions using greater than and less than

$\frac{1}{3}$is --------------------- ½

¼ is -------------------- $\frac{1}{5}$
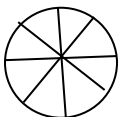
$\frac{1}{10}$is--------------------- $\frac{1}{6}$

**Work 5 period 6 comparing fractions using**

**>< or =**

Example

¼ _____<_____ ⅓



**Trial numbers**

**½** -------------- ⅓

**Exercise**

1. $\frac{2}{4}$ ------------------ ½
2. ⅓ ------------------ ¼
3. $\frac{1}{5}$ ------------------ ½
4. $\frac{1}{6}$ ------------------ $1/10$

**Work 5 period 7 pg 101-103**

**Addition of fractions**

**Examples**

1. Add $\frac{2}{6}+\frac{3}{6}=\underline{2+3}$

$\qquad\qquad\qquad\qquad 6$

2. Add $\frac{1}{7}+\frac{2}{7}=\underline{1+2}=\frac{3}{7}$

$\qquad\qquad\qquad\qquad 7$

**Trial number**

I. $\qquad \frac{2}{10}+\frac{7}{7}=$

II. $\qquad \frac{3}{5}+\frac{1}{5}=$

**Exercise**

1. $\frac{3}{10}+\frac{4}{10}=$-------
2. $\frac{4}{9}+\frac{3}{9}=$ ---------
3. $\frac{7}{15}+\frac{6}{15}=$ --------
4. $\frac{9}{20}+\frac{5}{20}=$ -------
5. $\frac{3}{8}+\frac{4}{8}=$ ----------

**Work 5 period 9 and 10**

**Word problems involving addition in fraction**

Find the sum of $\frac{7}{11}$ and $\frac{2}{11}$

1. $\frac{7}{11}+\frac{2}{11}=\frac{9}{11}$

2. Jane dug $\frac{3}{10}$ on Monday and $\frac{2}{10}$ on Tuesday. What fraction did she dig

Monday $=\frac{3}{10}$

Tuesday $=\frac{2}{10}$

$\frac{3}{10}+\frac{2}{10}=\frac{3+2}{10}=\frac{5}{10}$

**Trial number**

Monica ate $\frac{2}{5}$ of her cake in the morning and $\frac{1}{5}$ in the evening. What fraction of the cake did she eat altogether?

**Exercise**

1. Nyaweeka ate $\frac{3}{15}$ 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

$$½ \text{ x } ½$$
$$\frac{NXN}{DXD}= \frac{1X1}{2X2}= \frac{1}{2}$$

$$\frac{1X1}{2X2} = ¼$$

**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 $^{3}/_{6}$

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