



**P.3**

# **TERM TWO**

# **MATHEMATICS**

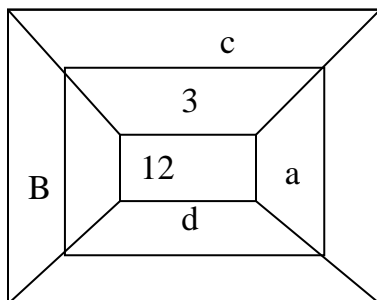
**TOPIC NUMBER PATTERNS AND SEQUENCES**

**Period 1**

**Content**

2<sup>nd</sup> 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

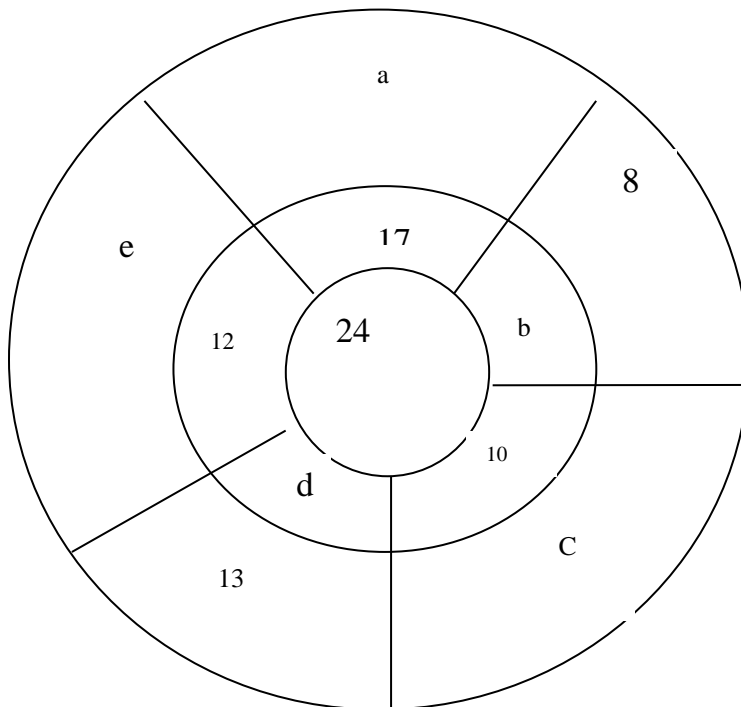
A. Find the value of

b -----

d.....

#### Exercise

Find the missing numbers



a .....

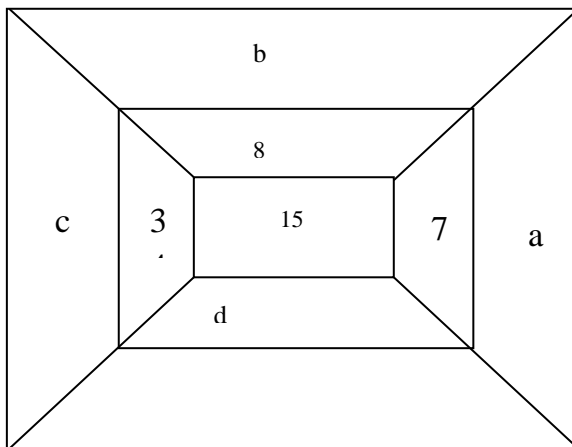
b .....

c .....

d .....

e .....

2.



- a .....
- b .....
- c .....
- d .....
- e .....

**Ref pg: 81**

**Period 3 and 4**

**Find the missing numbers**

**Example**

+2=9

=9-2

=7

(2)  $x+4=5$

$x=5- 4$

$x=1$

**Trial numbers**

1.  +6=15

2.  $Y+7=20$

## Exercise

Find the missing numbers

1       $\square + 2 = 5$

2       $\square + 12 = 18$

5       $x + 5 = 10$

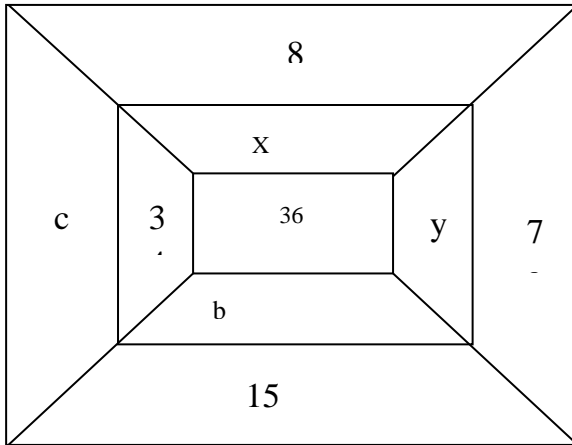
3.      $\square + 9 = 14$

4       $\square + 5 = 12$

6       $m + 6 = 17$

## PERIOD 5 AND 6

### CONTENT



$$X = 25 - 8$$

$$X = 17$$

$$Y = 25 - 7$$

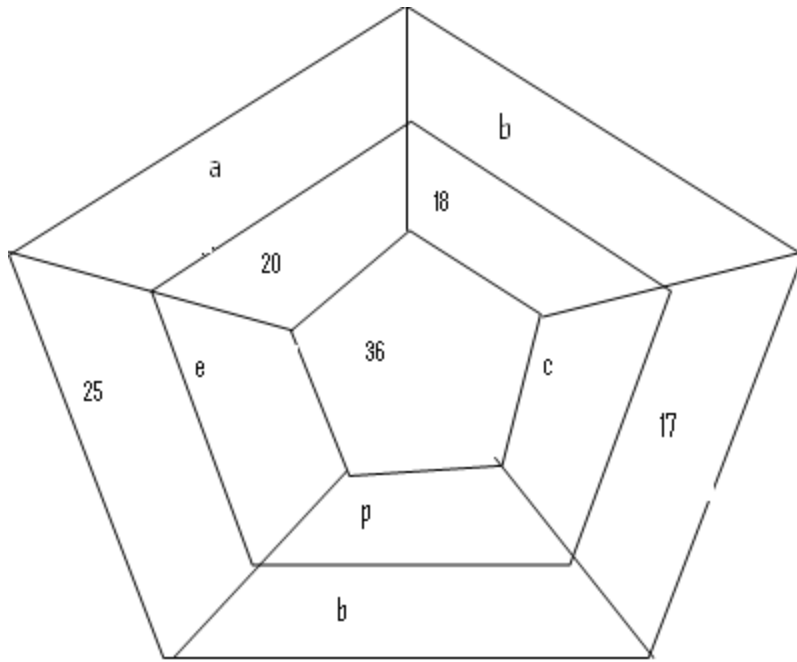
$$Y = 18$$

### TRIAL NUMBER

Find the value of :

a.....

d ..... exercise



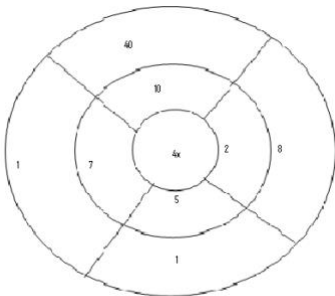
Find the value of

a..... b..... c..... d.....  
*ref:pg81*

**Period 7&8**

**Content**

**Finding missing numbers**



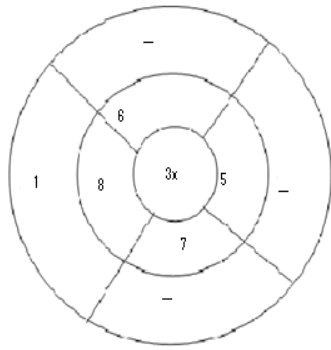
$4x-2=8$   
 $4x10=40$

**Trial numbers**

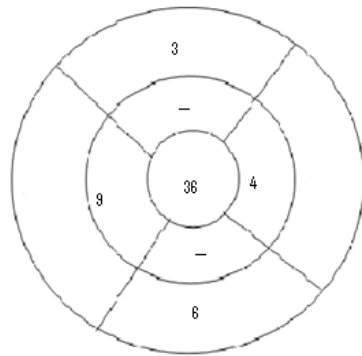
$4x5=.....$   
 $4x7=.....$

**Exercise:** find the missing numbers in the wheel

1.



2.



Ref: mk ppbk3pg:82

**Work2: period 9&10.pg84**

**Finding the missing number**

$$3 \times 4 = 12$$

$$3 \times 4 = 12$$

$$3 \times \square = 12$$

Solution

$$3 \div 3 \times \square = 12 \div 3$$

$$\square = 4$$

**Trial numbers**

$$\square \times 3 = 9$$

$\square \times 2 = 8$

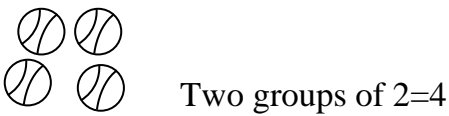
**Exercise**

- i.  $2 \times 5 = \square$
- ii.  $3 \times \square = 15$
- iii.  $4 \times \square = 8$
- iv.  $\square \times 7 = 14$
- v.  $\square \times 6 = 12$

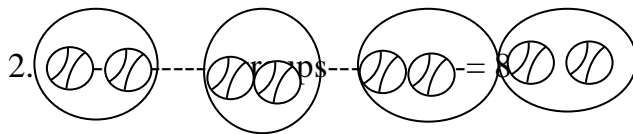
**Work 3 period 1 pg 84**

**Counting in twos**

**Example**



**Trial numbers**



**Exercise**



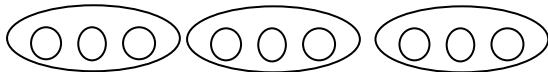
4. ○○ ○○ ○○ ○○ ○○ ○○ ○○ = ----- groups of ----- =

**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**

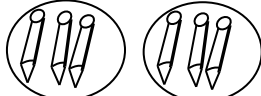
1.  = ----- Group of ----- = -----

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**



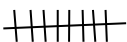
a. 1 fives = 5

2 fives = 5+5=10

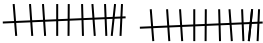
 = 5+5=10

### Example2



1 tens = 10

 = 10

2 Tens == 10+10=20

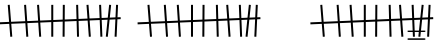
 = 2 groups of tens = 20

### 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, -----

### Finding more on missing numbers

#### Example :

1 . 0, 2, 4, 6, 8

0+2 =2

2+2=4

### Work 3 period 7&8pg-89

$4+2=6$

$6+2=8$

2. 1,2,3,4, 5

### Trial numbers

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

### **Exercise**

#### **Fin the missing numbers**

- 0,5,10, -----,20, -----
- 10, 20, 30 -----, -----
- 4, 8, 12, -----
- 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**

$= 2 \times 2 = 4$

Counting numbers

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

whole numbers: these are numbers without fraction

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

### **TRIAL NUMBERS**

- list all the counting numbers less than 10
- Write down the whole numbers from 0-9.
  - Exercise
  - 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 than 5 }
- vi.
- Write all members of set A
  - List down all members of set B
  - How many members are in set B
  - Find set A ∩ B
  - which set has more members

- List down all even numbers between 10 and 20
- Set P = { all odd numbers less than 10 }

  - List down all elements of set p
  - How many elements are in set p

- Set A = { all; even numbers between 2 and 10 }

  - List down all elements of set A
  - 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 remainder.

Even numbers are numbers which are divisible by two.

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

### Trial numbers

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

Exercise

- List down all the odd numbers between 6 and 13

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

Naming fractions

**Write**

1

**read**

one whole or  
a whole





$\frac{1}{2}$

one half or a half



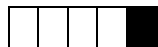
$\frac{1}{3}$

one third or a third



$\frac{1}{4}$

one quarter or a quarter



$\frac{1}{5}$

one fifth or a fifth



$\frac{1}{6}$

one sixth or a sixth

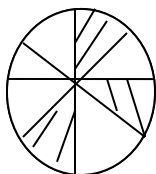
### Examples

#### Write and the following fractions



$\frac{2}{6}$

two sixths



$\frac{3}{8}$

Three eighths

#### Trial numbers



#### Exercise

Write the following fractions in words

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

-

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

$\frac{1}{10}$  = -----

$\frac{3}{5}$  = -----

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

-

### Work period 10 pg 96

#### Drawing and shading fractions

#### Example

$\frac{1}{3}$  =



Example 2

$\frac{3}{5}$  =



#### Exercise

#### Draw and shade the following fractions

1.  $\frac{1}{4}$  (2.)  $\frac{3}{7}$  (3)  $\frac{4}{10}$

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



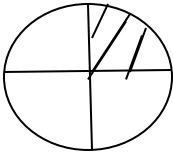
2.



Name the shaded fraction

**Exercise**

1.



Which fraction is un shaded

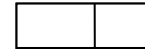
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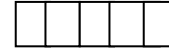
Name the un shaded fraction

**Exercise**

$\frac{1}{2}$



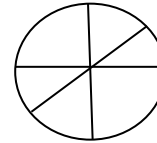
$\frac{2}{5}$



$\frac{4}{5}$



$\frac{1}{6}$



**Week 5 period 4 pg 99**

**Comparing fractions using bigger than, smaller than**

**Example**

$\frac{1}{2}$  is bigger than  $\frac{1}{4}$



$\frac{1}{3}$  is smaller than  $\frac{1}{2}$



**Work 5 period 3 pg 98**

**Shading fraction s**

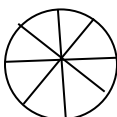
**Example**

Shade  $\frac{2}{5}$



**Trial number**

Shade  $\frac{3}{8}$



**Exercise**

Compare the following fraction using bigger and smaller

$\frac{1}{2}$  ----- 1

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

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

**Work period 5 pg99-100**

**Comparing fraction using greater than and Less than**

**Example**

$\frac{1}{2}$  is greater than  $\frac{1}{3}$



$\frac{1}{4}$  is less than  $\frac{1}{2}$



**Exercise**

Compare the following fractions using greater than and less than

$\frac{1}{3}$  is -----  $\frac{1}{2}$

$\frac{1}{4}$  is -----  $\frac{1}{5}$

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

**Work 5 period 6 comparing fractions using >< or =**

**Example**

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



**Trial numbers**

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

**Exercise**

1.  $\frac{2}{4}$  -----  $\frac{1}{2}$

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

3.  $\frac{1}{5}$  -----  $\frac{1}{2}$

4.  $\frac{1}{6}$  -----  $\frac{1}{10}$

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

**Addition of fractions**

**Examples**

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

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

**Trial number**

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

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

**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  $\frac{10}{15}$  in the evening which fraction of the sugarcane did she altogether
2. Find the sum of  $\frac{7}{12}$  and  $\frac{4}{12}$
3. I walked  $\frac{4}{9}$  of the journey and ran  $\frac{3}{9}$  of it. What fraction did I cover altogether

### Work 6period 1 & 2 pg 105-107

#### Subtraction of fractions

- a.  $\frac{5}{9} - \frac{3}{9} = \frac{5-3}{9} = \frac{2}{9}$
- b.  $\frac{6}{10} - \frac{5}{6} = \frac{6-5}{10} = \frac{1}{10}$

### Exercise

1.  $\frac{3}{7} - \frac{2}{7} =$
2.  $\frac{8}{20} - \frac{5}{20} =$
3.  $\frac{10}{15} - \frac{7}{15} =$
4.  $\frac{13}{25} - \frac{8}{25} =$

#### Word problems involving subtraction On fraction

##### Example

1. A boy had  $\frac{5}{6}$  of the cake. Heat  $\frac{2}{6}$ .

What fraction remained

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

##### Example 2

A girl had an orange. She gave away  $\frac{3}{4}$  of it. What fraction remained?

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

### Exercise

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

#### Multiplication of fractions

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

$$\frac{1X1}{2X2} = \frac{1}{4}$$

### TRIAL NUMBERS

Multiply  $\frac{2}{3} \times \frac{3}{5}$

### Exercise

1.  $\frac{1}{4} \times \frac{1}{2}$
2.  $\frac{3}{6} \times \frac{2}{6}$
3.  $\frac{1}{3} \times \frac{2}{7}$
4.  $\frac{2}{7} \times \frac{3}{6}$