

# END OF FIRST TERM EXAMINATION

## MATHEMATICS

### PRIMARY FIVE

Time allowed: 2 hours 30 minutes

Name : \_\_\_\_\_  
School : \_\_\_\_\_  
Stream : \_\_\_\_\_ Date: \_\_\_\_\_

#### Instructions:

- Answer all questions.
- Answers must be written in a blue / black ball pointed ink pen.
- Only diagrams or graph work must be done using a pencil.
- Avoid unnecessary crossing of work and write well.

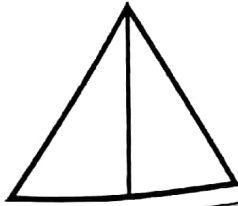
#### SECTION A: 40 MARKS

1	Workout: $4 \times 2$
2	Write in figures: four thousand, seventy-five.
3	Set $K = \{d, r, o, p\}$ and set $T = \{p, o, d\}$ . Describe the two sets using $=$ or $\neq$ .  Set K _____ set T
4	Find the next number in the sequence:  5, 8, 11, 14, 17, _____

5 Without dividing, which two numbers are divisible by 3?  
480 , 130 , 540 , 260

6 Which of the following fractions is equivalent to  $\frac{1}{3}$ ?  
 $\frac{3}{6}$  ,  $\frac{4}{15}$  ,  $\frac{3}{9}$

7 How many triangles are in the figure below.



8 Express XIV in Hindu Arabic numerals.

9 Change 2kg to grams.

10 Given that      stand for 20 balls. How many balls does  stand for?

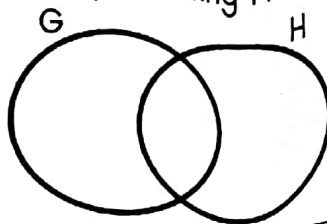
11 Find the missing number:

$$6 + \square = 14$$

12 Find the sum of all factors of 10.

13 Regann paid sh.40,000 for a radio of sh. 32,400. Find his change.

14 Shade the region representing  $H - G$  on the Venn diagram below.

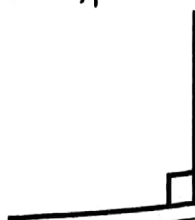


15 During a football match, there were 3,758 females and 5,067 male spectators. Find the total number of spectators watching the match.

16 Add:  $4\frac{2}{8} + 3\frac{3}{8}$

17 A trader bought a bag at sh. 30,000 and sold it for sh. 45,000. Find her profit.

18 Name the type of angle shown below.



19 Represent 28 using 1000

20 What is  $\frac{2}{5}$  of 150?

### SECTION B: 60 MARKS

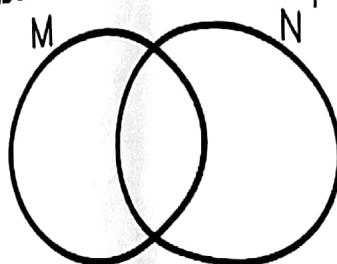
21 Set M = {all even numbers between 5 and 15} and set N = {4, 5, 7, 10, 13, 14}

a. List all members of set N.

(1 mark)

b. Use the above information to complete the Venn diagram below.

(3 marks)

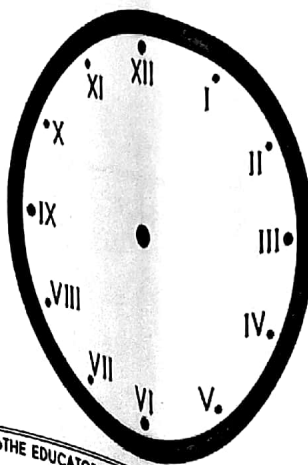


c. Find  $n(N - M)$

(1 mark)

22 a. Show 9:30 on the clock face below.

(2 marks)



b. A meeting started at 10:30a.m and ended at 11:40a.m. How long was the meeting? (2 marks)

23 a. List all multiples of 5 less than 40. (2 marks)

b. What is the difference between the fifth even number and the third odd number? (3 marks)

24 a. Add: (2 marks)

	<i>l</i>	<i>ml</i>
	3	2 4 0
+	2	4 7 5
<hr/>		
<hr/>		

b. How many half litre cups can fill a 10 litre container? (2 marks)

25 a. Workout:  $3 - \frac{4}{5}$  (2 marks)

b. Change  $\frac{49}{6}$  to mixed fraction. (2 marks)

c. In a class of 20 pupils,  $\frac{1}{4}$  of them are absent. How many pupils are present? (2 marks)

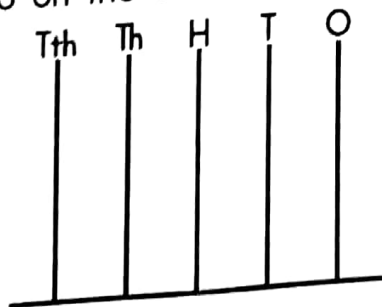
26 During the trip to the park, P.5 class used 4 coasters as follows; the first three coasters carried 13 boys and 15 girls each; the fourth coaster carried 8 boys, 9 girls and 7 teachers.

a. How many pupils were carried by the three coasters? (2 marks)

b. How many girls went for the trip? (2 marks)

c. Find the total number of people who went for the trip. (2 marks)

27 a. Show 20,453 on the abacus below. (2 marks)



b. Find the product of the values of 9 and 7 in the number 23,907. (3 marks)



28 Study the price list below and answer the questions that follow.

\* meat

\* rice

\* tomatoes

\* cooking oil

→ sh. 15,000 per kg

→ sh. 4,000 each kg

→ sh. 2,000 per heap

→ sh. 7,500 per litre

a. What is the most expensive item on the list above.

(1 mark)

b. How much did Deborah pay for 4 litres of cooking oil?

(2 marks)

c. Solomon had sh. 5,000 and bought a heap of tomatoes. Find his change.

(2 marks)

29 a. What number has been prime factorised to get  $2 \times 2 \times 3 \times 3$ ?

(2 marks)

b. Find the LCM of 8 and 12.

(2 marks)

c. Find the HCF of 8 and 12.

(2 marks)

30 A rectangular compound is 20m long and 10m wide.

a. Workout its area.

(2 marks)

b. Find the distance around the compound.

(2 marks)

31 a. What is the place value of 2 in the number  $123_{\text{five}}$ ?

(1 mark)

b. Change  $23_{\text{five}}$  to base ten.

(2 marks)

c. Change  $16_{\text{ten}}$  to base five.

(2 marks)

32 Larry did mid of term exams and scored as follows.

Subjects	ENG	SCI	S.ST	MTC	Total
Marks	72	—	86	94	330

a. Find the total marks he scored in MTC, ENG and S.ST.

(2 marks)

b. How many marks did he score in SCI?

(2 marks)

c. Which subject did he do best?

(1 mark)

*Wish You Success...!*



# PRIMARY FIVE END OF FIRST TERM

Solution

Factors of 10

$$10 \div 10 = 1$$

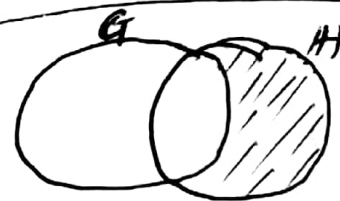
$$10 \div 5 = 2$$

$$10 \div 2 = 5$$

factors of 10 = {1, 2, 5}

$$\text{sum} = 1 + 2 + 5 = 8$$

$$\begin{array}{r} \text{sh. } 40,000 \\ - \text{sh. } 32,400 \\ \hline \text{sh. } 7,600 \end{array}$$



$$\begin{array}{r} 3,758 \\ + 5,067 \\ \hline 8,825 \text{ spectators} \end{array}$$

$$4\frac{2}{8} + 3\frac{3}{8}$$

$$\frac{8 \times 4 + 2}{8} + \frac{8 \times 3 + 3}{8}$$

$$\frac{32 + 2}{8} + \frac{24 + 3}{8}$$

$$\frac{34}{8} + \frac{27}{8}$$

$$\frac{34 + 27}{8}$$

$$= \frac{61}{8} = 7\frac{5}{8}$$

$$= \frac{61}{8} = 7\frac{5}{8}$$

# PRIMARY FIVE END OF FIRST TERM

Solution

$$\begin{array}{r} 4 \\ \times 2 \\ \hline 8 \end{array}$$

$$\begin{array}{r} \text{four thousand} = 4,000 \\ \text{seventy-five} + 75 \\ \hline 4,075 \end{array}$$

$$\text{set R} \neq \text{set T}$$

$$\begin{array}{ccccccc} 5 & 8 & 11 & 14 & 17 & 20 \\ \wedge & \wedge & \wedge & \wedge & \wedge & \\ +3 & +3 & +3 & +3 & +3 & \end{array}$$

$$\text{and } 540,450$$

$$\frac{3}{6} \text{ is equivalent to } \frac{1}{2}$$

3 Triangles

$$\begin{array}{r} x | 14 \\ 10 \overline{) 14} \\ \hline 4 \end{array}$$

$$x | 14 = 4$$

$$\begin{array}{l} 1 \text{ kg} = 1000 \text{ g} \\ 2 \text{ kg} = (2 \times 1000) \text{ g} \\ = 2000 \text{ grams} \end{array}$$

$$\begin{array}{l} 5 \text{ ball} \rightarrow 20 \text{ balls} \\ 1 \text{ ball} \rightarrow (20 \div 5) \text{ ball} \\ = 4 \text{ balls} \end{array}$$

1 ball stand for 4 balls

$$6 + \square = 14$$

$$\begin{array}{l} 6 - 6 + \square = 14 - 6 \\ \square = 8 \end{array}$$

$$S.P - B.P = \text{profit}$$

$$\text{Sh.}(45,000 - 30,000) = \text{profit}$$

$$= \text{Sh. } 15,000 \text{ her profit}$$

Right angle.

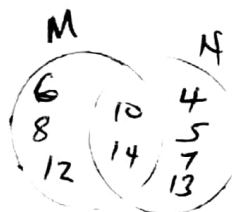
19.  $\begin{array}{ccccccc} \text{HH} & \text{HH} & \text{HH} & \text{HH} & \text{HH} & \text{HH} & \text{HH} \\ 5 & 5 & 5 & 5 & 5 & 5 & 3 \end{array}$

$$\frac{2}{5} \times 150$$

$$1 \quad 2 \times 30$$

$$= 60$$

$$21. \text{Set } N = \{4, 5, 7, 10, 13, 14\}$$



$$(c) n(M - N) = \{4, 5, 7, 13\}$$

$n(M - N) = 4 \text{ elements}$

22



22b) Ending time - starting time

Ending	Starting
14:40 am	10:30 a.m.
1	10

The meeting took 1 hour and 10 minutes

23a) Multiples of 5  
 $\{5, 10, 15, 20, 25, 30, 35\}$

(b) Even = 0, 2, 4, 6, 8, 10, 12  
Odd = 1, 3, 5, 7, 9, 11  
Difference =  $8 - 5 = 3$

$$24a) \begin{array}{r} \text{L} \quad \text{ML} \\ 3 \quad 240 \\ + 2 \quad 475 \\ \hline 5 \quad 715 \end{array}$$

$$(b) \left(\frac{1}{2} \times 10\right) \text{ litre}$$

$$= 5$$

$$25a) \frac{3}{1} - \frac{4}{5}$$

$$\frac{5 \times 3 - 1 \times 4}{5}$$

$$\frac{15 - 4}{5}$$

$$= \frac{11}{5}$$

$$\frac{5 \times 3 - 1 \times 4}{5}$$

$$\frac{15 - 4}{5}$$

$$= \frac{11}{5}$$

$$(b) \frac{49}{6} = 8 \frac{1}{6}$$

$$8 \frac{1}{6}$$

$$(c) \frac{1}{4} \times 20^5$$

5 pupils were present

$$26a) 13 + 15 = 28 \text{ pupils}$$

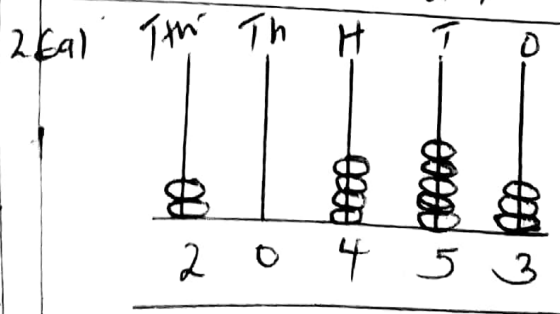
$$(28 \times 3) = 84 \text{ pupils}$$

$$(b) 15 + 9 = 24$$

$$(24 \times 3) = 72 \text{ girls}$$

$$\text{Total} = (84 + 72) + 7$$

163 people went for a trip



$$25907$$

T/h	T/h	T/h	T/h	T/h
2	3	9	0	7

$$\begin{aligned} & \rightarrow (7 \times 1) = 7 \\ & \rightarrow (9 \times 100) = 900 \\ & \text{Product} = 900 \\ & \quad \times 7 \\ & \hline & 6300 \end{aligned}$$

28 a) Meat

(b) Cooking oil

$$\begin{aligned} 1 \text{ litre} & \rightarrow \text{Sh. } 7500 \\ 4 \text{ litres} & \rightarrow \quad \times 4 \\ & \hline & \text{Sh. } 30000 \end{aligned}$$

(c) Tomatoes

$$\begin{aligned} & \text{Sh. } 5000 \\ & - \text{Sh. } 2000 \\ & \hline & \text{Sh. } 3000 \end{aligned}$$

29

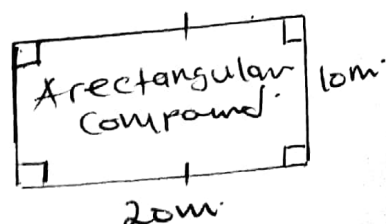
$$\begin{aligned} & 2 \times 2 \times 3 \times 3 \\ & 4 \times 9 \\ & = 36 \end{aligned}$$

HCF 8 and 12

②	8	12
②	4	6
2	2	3
3	1	3

HCF of 8 and 12 = 2

30



$$A = l \times w$$

Total

$$\begin{aligned} & 2(l+w) \\ & 2(20+10)m \\ & 2(30)m \\ & = 60m \end{aligned}$$

$$\begin{array}{r} 219 \\ \hline \end{array} \quad \begin{array}{c|c|c} 1 & 2 & 3 \\ \hline \end{array} \begin{array}{l} \text{five} \\ \text{five} \end{array}$$

(b)  $23$  five — ten

$$\begin{aligned} & (2 \times 5) + (3 \times 5) \text{ — ten} \\ & 10 + 3 \text{ — ten} \\ & = 13 \text{ ten} \end{aligned}$$

No	Base	Rem
16	5	1
3		3

31 five

32

$$\begin{aligned} & 72 + 86 + 94 \\ & = 252 \end{aligned}$$

$$\begin{array}{r} 252 \\ - 836 \\ \hline 252 \\ \hline 78 \end{array}$$

(c) Mathematics

END