



# BROAD EXAMINATIONS®

## P.6 MATHEMATICS EXAMINATION

### END OF TERM II 2024

Time allowed: 2 hours 30 minutes

Pupil's Name: \_\_\_\_\_

School Name: \_\_\_\_\_

District Name: \_\_\_\_\_

**Read the following instructions carefully:**

1. This paper is made up of two sections: A and B.
2. Section A has 20 questions (40 Marks)
3. Section B has 12 questions (60 Marks)
4. Answer ALL questions in both sections A and B.
5. All answers must be written in the space provided in blue or black ball point pens and ink. Only diagrams should be done in pencil.
6. Unnecessary crossing of answers will lead to loss of marks.
7. Any handwriting, which cannot be easily read, may lead to loss of marks.
8. Do not fill anything in the boxes indicated for Examiners' use only.

**Teacher's comment to the learner**

FOR EXAMINERS' USE ONLY		
PAGES	MARKS	GRADE
Page 2		
Page 3		
Page 4		
Page 5		
Page 6		
Page 7		
Page 8		
<b>TOTAL</b>		

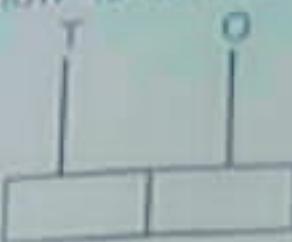
Approved by:

From Head Mathematics Dept

**SECTION A (40 MARKS)**

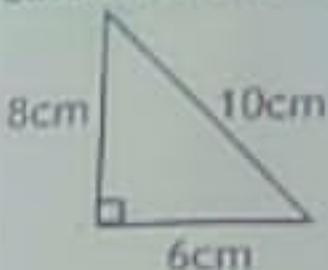
1. Subtract: 
$$\begin{array}{r} 6 & 7 \\ - 1 & 2 \\ \hline \end{array}$$

2. Show 43 on the abacus below.

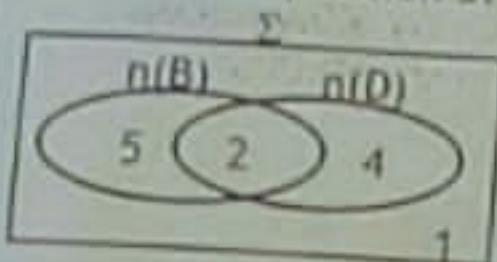


3. Work out:  $\frac{2}{5} + \frac{1}{5}$

4. Calculate the area of the figure below.



5. Study the Venn diagram below and use it to answer question 5.



6. Draw an angle of  $80^\circ$  in the space below using a protractor.

Find  $n(B \cup D)$ .

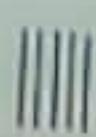
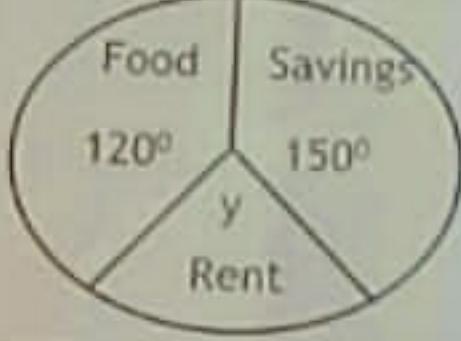
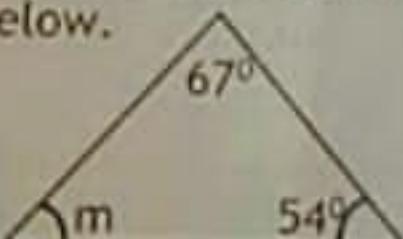
7. Express 10:45am to 24hour clock system.

8. Solve:  $r + 2r = 12$

9. What is the highest number of boys who can share either 12 mangoes or 16 mangoes without leaving any mango?

10.

Which integer is 4 steps to the left of -1?

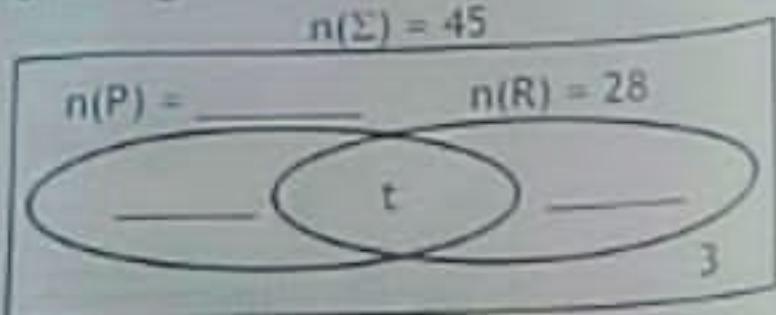
11.	US \$ 1 = Ush. 3700, how many US dollars can one get from Ush. 1,850,000?	12.	Find the square of 14.
13.	Upper Primary pupils at Buhumba P/S were counted and recorded as shown below.    How many pupils are there altogether?	14.	Given that set Q = {first five whole numbers}. List all the elements of set Q.
5.	The pie-chart below shows how Mr. Richard spends his weekly allowances. How much does he spend on food if he gets allowances worth sh. 90,000? 		
	Subtract: $\begin{array}{r} 2 & 0 & 1 \text{five} \\ - 1 & 1 & 1 \text{five} \\ \hline \end{array}$	17.	Find the range of -2, +3, 0, +1 and -4
	Find the unknown angle in the figure below. 	19.	Four rulers cost sh.6000. Find the cost of 5 similar rulers.

20. Daudi deposited sh. 120,000 in a bank that offers an interest rate of 2% per annum for  $1\frac{1}{2}$  years. Find the simple interest he got after that time.

**SECTION B. (60 Marks)**

1. In a group of 45 pupils, 14 pupils like Posho (P) only, 23 pupils like Rice (R) only,  $t$  pupils like both types of food while 3 like neither of the two types of food.

(i) Represent the above information on the Venn diagram below.



(ii) Find the value of  $t$ .

How many pupils do not like posho at all?

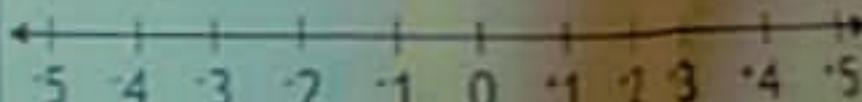
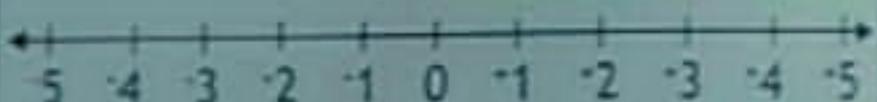
(04 marks)

Work out the following using a number line:

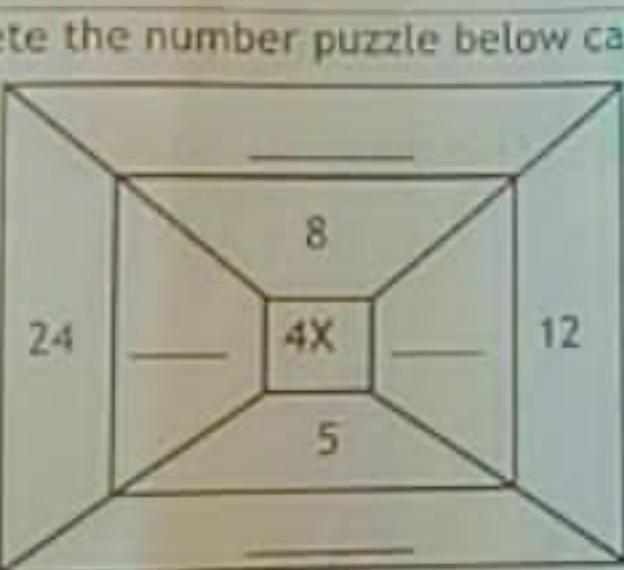
$$-4 + 6$$

(b)

$$-3 - (-4)$$



(04 marks)

<p>Given the digits 7, 0 and 5 Write all the 3-digit numerals that can be formed using the digits above.</p>	<p>(b)</p>	<p>Find the difference between the largest and the smallest odd numbers formed.</p>
<p>In a class, 40% are boys and the rest are girls. Find the percentage of girls.</p>	<p>(b)</p>	<p>If there are 20 boys in the class, how many pupils are in the class?</p>
<p>Complete the number puzzle below carefully.</p>		<p>(05 marks)</p>
	<p>(04 marks)</p>	
<p>(a) Dickens was facing North. He turned clockwise through an angle of <math>135^\circ</math>. What is his new direction?</p>	<p>(b)</p>	<p>Through which angle does one turn anticlockwise from Southeast to West?</p>
<p>(05 marks)</p>		

<p>27. (a) Given that <math>F_{60} = \{2_1, 2_3, x_1, 5_1\}</math> and <math>F_Y = \{2_1, 3_1, 3_2, 3_1\}</math>. Find the value of;</p> <table border="1"> <tr> <td>(i) <math>x</math></td><td>(ii) <math>Y</math></td></tr> </table> <p>(b) Find the GCF of 60 and Y using the above factors.</p>				(i) $x$	(ii) $Y$								
(i) $x$	(ii) $Y$												
(06 marks)													
<p>28. The table below shows marks scored by pupils in End of term test.</p> <table border="1"> <thead> <tr> <th>Marks</th><th>60</th><th>95</th><th>55</th><th>80</th></tr> </thead> <tbody> <tr> <td>No. of pupils</td><td>—</td><td>1</td><td>4</td><td>3</td></tr> </tbody> </table> <p>(a) If 10 pupils did the test, how many pupils scored 60 marks?</p> <p>(b) Find the modal score.</p> <p>(c) Calculate the average score.</p>				Marks	60	95	55	80	No. of pupils	—	1	4	3
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(06 m)													

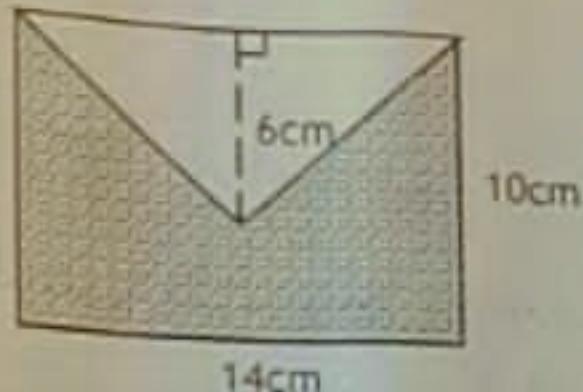
7. (a) Find the missing value in the box below.

$$\boxed{\quad} \times 4 = 28$$

(b)

A man is three times as old as his son. The difference between their ages is 30 years, how old is each?

The figure below shows a triangle inscribed in a rectangle. Study it and answer the questions that follow. (05 marks)



Find the area of the triangle.

(b)

Work out the area of the shaded part.

(06 marks)

A bank cashier received a bundle sh.5000 note numbered consecutively from DH2650321 to DH2650420.

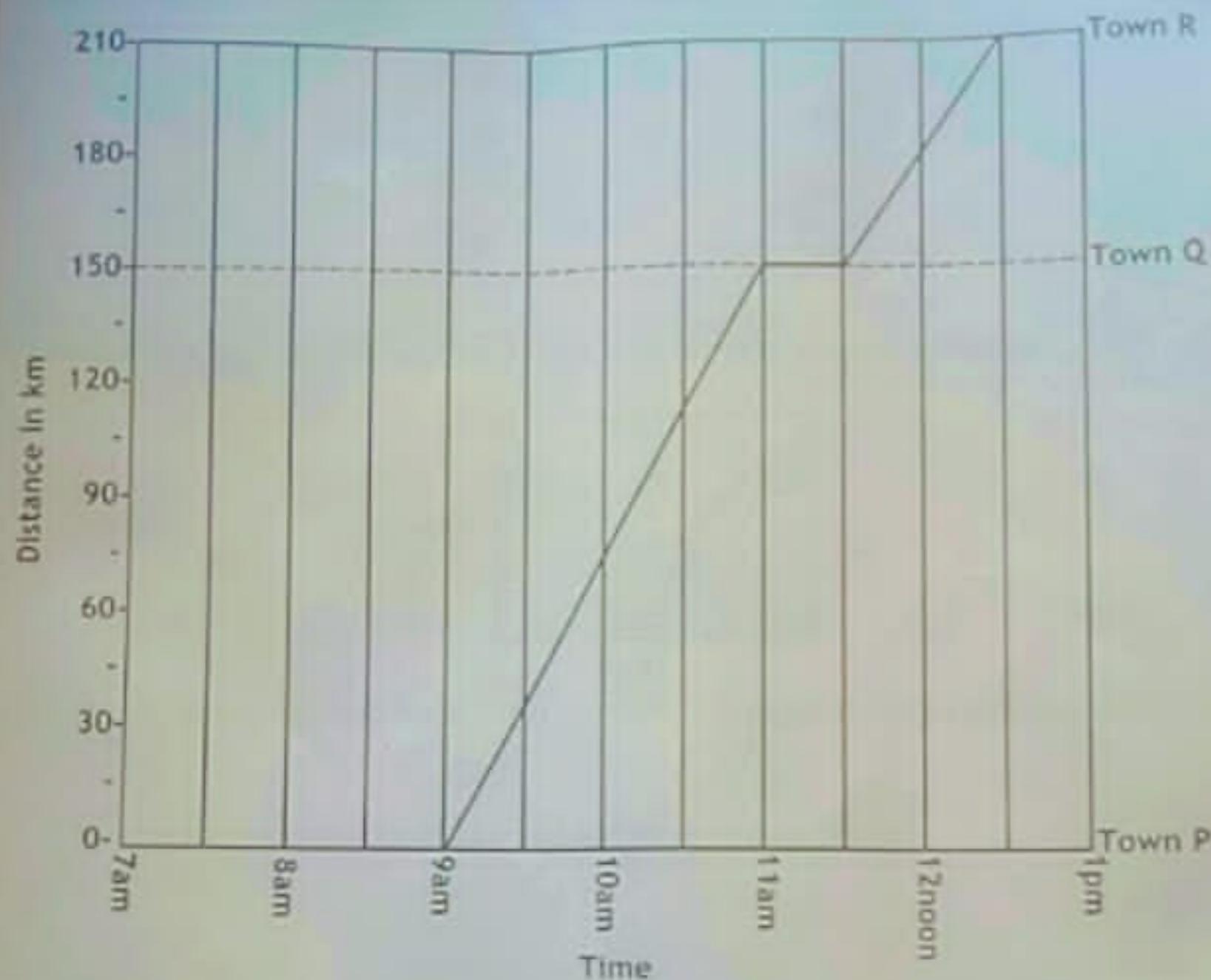
How many shilling notes did he receive?

(b)

How much money did he receive?

(04 marks)

32. The travel graph below shows the journey of a lorry from town P to town R through town Q. Study and use it to answer the questions that follow.



- |     |  |     |  |
|-----|--|-----|--|
| (a) | At what time did the lorry reach town R?                   | (b) | For how long did the lorry rest at town Q? |
| (c) | Calculate the lorry's average speed for the whole journey. | (d) | How far is town R from town Q?             |

END

(05 marks)