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LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF
EDUCATION

VHEMBE EAST DISTRICT

GRADE 8

MATHEMATICS

TERM 3 COMMON TEST

SEPTEMBER 2026

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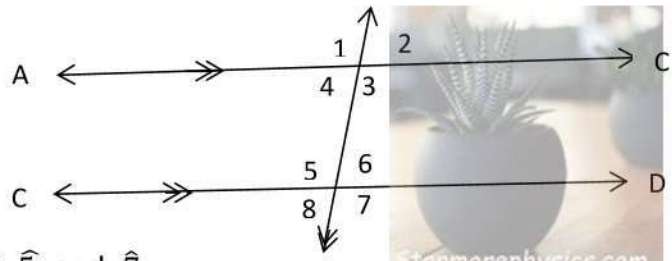
MARKS: 50

DURATION: 1H30Min

INSTRUCTIONS

1. This paper consists of 5 pages including cover page.
2. Read all the instructions carefully before answering.
3. Answer all questions on separate papers provided.
4. Show all your calculations.
5. Approved scientific calculators (non-programmable and non-graphical) may be used otherwise stated.

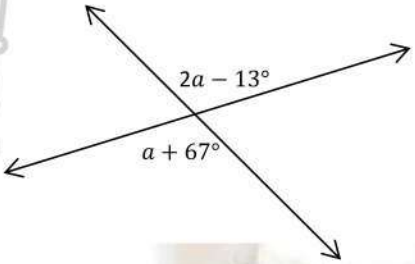
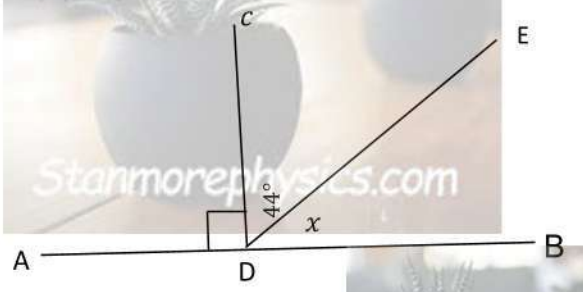
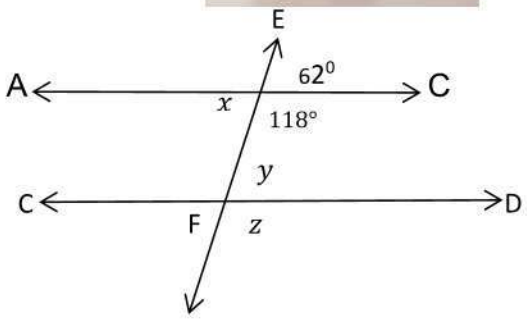
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Question Number	Question 1	Marks
QUESTION 1: MULTIPLE CHOICE QUESTIONS		**10**
	Circle the letter with the correct answer	
1.1.	A line which cuts parallel lines is called … A. Interesting line B. Symmetrical line C. Line segment D. Transversal line	(1)
1.2.	Which statement is incorrect? When lines are parallel: A. Corresponding angles are equal B. Alternate angles are equal C. Co-interior angles add up to 180^0 D. Vertically opposite angles are unequal.	(1)
1.3.	In the figure below AB//CD which pair of angles has a sum of 180^0?  A. $\hat{5}$ and $\hat{7}$ B. $\hat{3}$ and $\hat{6}$ C. $\hat{1}$ and $\hat{5}$ D. $\hat{4}$ and $\hat{6}$	(1)
1.4.	Sum of interior angles of a triangle is equal to …… A. 90^0 B. 180^0 C. 270^0 D. 360^0	(1)
1.5	Each interior angle in an equilateral triangle equals to: A. 30^0 B. 60 C. 90^0 D.180^0	(1)

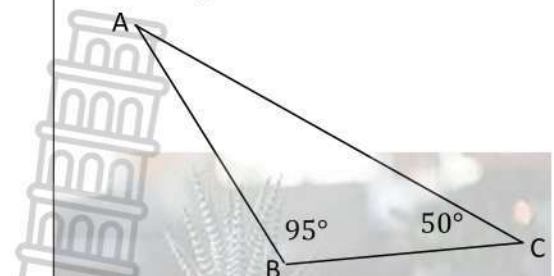
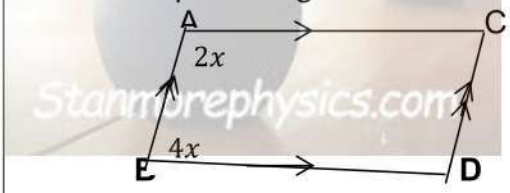
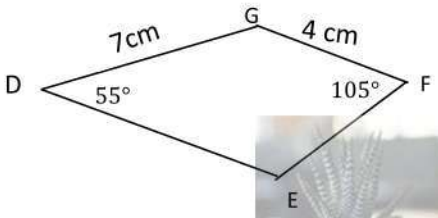
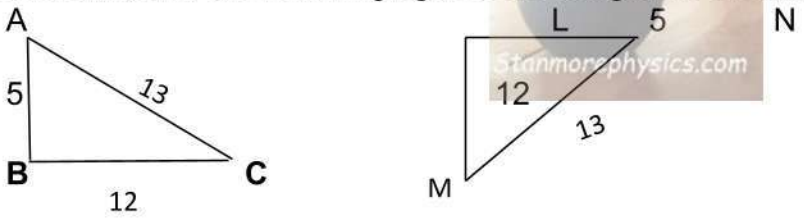
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1.6.	A quadrilateral having all sides equal and opposite angles equal is called a …… A. Rhombus B. Rectangle C. Kite D. Square	(1)
1.7.	The difference between the highest value and lowest value in a data set is called…….. A. Median B. Mode C. Range D. Mean	(1)
1.8.	The following marks out of 50 were scored by learners in a Mathematics test. 13 | 12 | 27 | 29 | 34 | 35 | 45 | 41 | 43 | 43 | 46 | 49 | 50 Determine the mode of the data set. A. 43 B. 41 C. 27 D. 46	(1)
1.9	The number of times a particular data value occurs is known as: A. Tallies B. Frequency C. Stem D. Stem and leaf	(1)
1.10.	A box of pens contains 8 green pens, 4 red pens, 3 blue pens and five black pens. A pen is randomly selected from the box. What is the probability of selecting green pens? A. $\frac{5}{20}$ B. $\frac{3}{20}$ C. $\frac{4}{20}$ D. $\frac{2}{5}$	(1)

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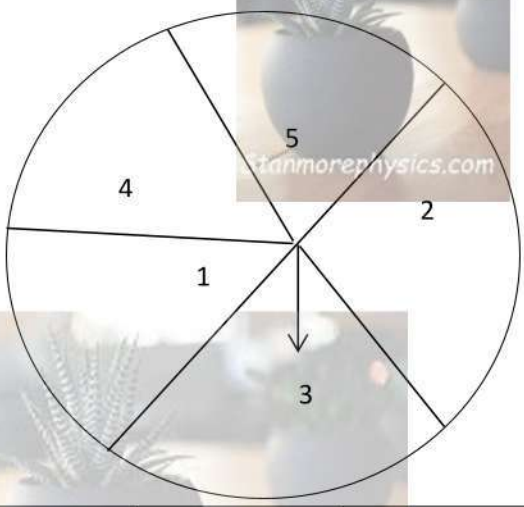
	Question 2	13
2.1.	Study the diagram below showing intersecting lines.  Determine the value of a.	(3)
2.2.	In the figure below CD⊥AD  Calculate the value of x, giving reason(s) for your statement(s)	(4)
2.3.	In the diagram below AB//CD. Determine with reasons the value of x, y and z.  	(6)

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	QUESTION 3	13
3.1	In ΔABC, find the size of $\hat{A}$ 	(4)
3.2	ABCD is a parallelogram. Calculate the value of x 	(4)
3.3	$DEFG$ is a kite, what are the lengths of DE and EF 	(4)
3.4.	Decide whether the following figures are congruent or similar 	(1)

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	QUESTION 4	**14**
4.1	The mathematics test marks of a group of Grade 8 learners are given below: 46 77 56 55 49 53 68 60 63 71 56	
4.1.1	Determine the value of median.	(1)
4.1.2	Calculate the mean of the marks, correct to two decimal places.	(3)
4.2.	The data below shows the number of bricks delivered on different days: Organize the following set of data using stem and leaf display 564 534 544 568 588 590 510 523 533 537 555	(3)
4.3.	A bag contains 1 yellow ball, 3 blue balls, 5 red balls and 3 green balls.	
4.3.1	How many balls is there altogether in the bag?	(1)
4.3.2	What is the probability of drawing a yellow ball from the bag?	(1)
4.3.3	What is the probability of drawing a blue ball from the bag?	(1)
4.3.4	What is the probability of drawing a red ball from the bag?	(1)
4.4	The diagram shows a spinner with 5 equal sized sectors. The spinner is spun 20 times and the results are recorded in a table below.	



Outcomes	1	2	3	4	5
Frequency	3	5	4	5	3

4.4.1	Determine the relative frequency of 3.	(1)
4.4.2	Write down the frequency and the relative frequency of 5?	(2)
	TOTAL: 50 MARKS	

END

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DEPARTMENT OF
EDUCATION

VHEMBE EAST DISTRICT

SENIOR PHASE

GRADE 8



MATHEMATICS CONTROLLED TEST

MEMORANDUM

TERM 3

September 2026

MARKS: 50

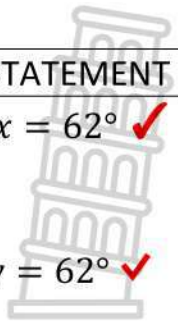
This memorandum consists of 5 pages including the cover page.

NB: This is a marking guide, please unsure that learners who use correct alternative methods are credited

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NO	MATHEMATICAL CALCULATIONS	CLARIFICATION ON MARK ALLOCATION	TOTAL MARKS
	QUESTION 1		**[10]**
1.1	D ✓	Correct answer : 1mark	1
1.2	D ✓	Correct answer :1 mark	1
1.3	B ✓	Correct answer : 1mark	1
1.4	B ✓	Correct answer : 1mark	1
1.5	B ✓	Correct answer 1mark	1
1.6	A ✓	Correct answer : 1mark	1
1.7	C ✓	Correct answer : 1mark	1
1.8	A ✓	Correct answer : 1mark	1
1.9	B ✓	Correct answer : 1mark	1
1.10	D ✓	Correct answer : 1mark	1
	QUESTION 2		**[13]**
2.1	STATEMENT: $a + 67° = 2a - 13°$ ✓; $a = 80°$ ✓ — REASON: *vertically opposite angles* ✓	Statement : 1mark Reason : 1mark	3
2.2	STATEMENT: $x + 44° + 90° = 180°$ ✓; $x + 134° = 180°$; $x = 180° - 134°$ ✓; $x = 46°$ ✓ — REASON: *sum of angles on a straight line* ✓	Statement : 1mark Reason : 1mark Method : 1mark Answer : 1mark	4

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2.3	 STATEMENT / REASON $x = 62°$ ✓ — Vertically opposite angles ✓ $y = 62°$ ✓ — Corresponding angles AB//AD ✓ $z = 110°$ ✓ — Corresponding angles AB//CD ✓ 	Answer : 1mark Reason : 1mark Answer : 1mark Reason : 1mark Answer : 1mark Reason : 1mark	6 **[13]**
	QUESTION 3		
3.1	STATEMENT / REASON $\hat{A} + \hat{B} + \hat{C} = 180°$ ✓ — Sum of interior angles of a triangle ✓ $\hat{A} + 95° + 50° = 180°$ $\hat{A} + 145° = 180°$ ✓ $\hat{A} = 35$ ✓	Statement : 1mark Reason : 1mark Calculation : 1mark Answer : 1mark	4
3.2	STATEMENT / REASON $\hat{C} = \hat{A} = 2x$ — Opposite angles of a parallelogram ✓ $\hat{D} = \hat{B} = 4x$ — Opposite angles of a parallelogram ✓ $\hat{A} + \hat{B} + \hat{C} + D = 360°$ $2x + 4x + 2x + 4 = 360°$ ✓ — Sum of angles in a quadrilaterals $12x = 360°$ $\frac{12x}{12} = \frac{360°}{12}$ $x = 30°$ ✓ OR $2x + 4x = 180°$ ✓ — Co-interior angles ✓ $6x = 180°$ ✓ $\frac{6x}{6} = \frac{180°}{6}$ $x = 30°$ ✓	Statement and Reason : 1mark Statement and Reason : 1mark Statement : 1mark Answer : 1mark Statement : 1mark Reason : 1mark Calculations: 1mark Answer : 1mark	4

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3.3	STATEMENT: $DE = DG = 4cm$ ✓ / $FG = EF = 4cm$ ✓ — REASON: Adjacent sides are equal ✓ / Adjacent sides are equal ✓	Statement : 1mark Reason : 1mark Statement : 1mark Reason : 1mark	4
3.4	Congruent ✓	Answer : 1mark	1
	QUESTION 4		**[14]**
4.1 4.1.1	56 ✓	Answer : 1mark	1
4.1.2	Mean $= \frac{46+49+53+55+56+56+60+63+68+71+77}{11}$ ✓ $= \frac{654}{11}$ ✓ $= 59{,}45$ ✓	Method : 2marks Answer : 1mark	3
4.2	STEM: 51, 52, 53, 54, 55 ✓, 56, 58, 59 — LEAVES: 0, 3, 3 4 7, 4 ✓, 5, 4 8, 8, 0	Correct stem :1mark Correct leaves :1 mark Correctly organized: 1mark	3
4.3 4.3.1	12 balls ✓	Answer :1mark	1
4.3.2	$\frac{1}{12}$ ✓	Answer : 1mark	1

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4.3.3	$\frac{3}{12} = \frac{1}{4}$ *or* 0,25 ✓	Answer :1mark	1
4.3.4	$\frac{5}{12}$ ✓	Answer :1mark	1
4.4 4.4.1	$\frac{4}{20} = \frac{1}{5}$ *or* 0,2 ✓	Answer :1mark	1
4.4.2	Frequency $= 3$ ✓ Relative frequency $= \frac{3}{20}$ ✓	Answer : 1mark Answer : 1 mark	2

TOTAL: 50 MARKS

