



**LIMPOPO**  
PROVINCIAL GOVERNMENT  
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF  
**EDUCATION**

**VHEMBE DISTRICT**

**GRADE 8**

**MATHEMATICS PAPER 1**  
**2024 FINAL EXAMINATION**  
**MEMORANDUM**

### **Important Information**

Marks: 60

This memorandum consists of 5 pages including the cover page.

This is a marking guideline. In instances where learners have used different but mathematically sound methods to solve the problems, they should be credited

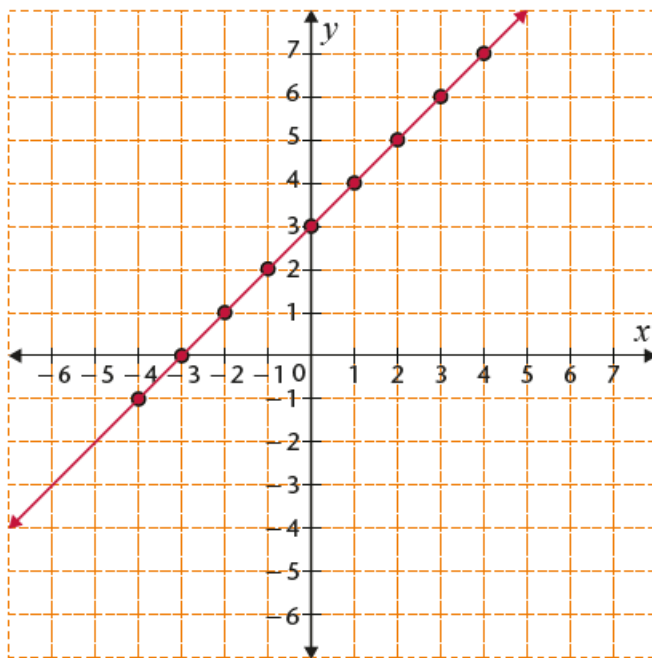
Question Number		Expected answer	Clarification	Marks	Total
1	1.1	C✓✓	Correct answer: 1 mark	2	<b>[10]</b>
	1.2	A✓✓	Correct answer: 1 mark	2	
	1.3	A✓✓	Correct answer: 1 mark	2	
	1.4	D✓✓	Correct answer: 1 mark	2	
	1.5	B✓✓	Correct answer: 1 mark	2	
2	2.1	FALSE✓		1	<b>[11]</b>
	2.2	M (12) = 12; 24; 36; 48; ... M (48) = 48; 96; ..... LCM (12;48) = 48 ✓	Correct answer: 1 mark	1	
	2.3	Prime factors (180) = 2x2x3x3x5 ✓✓	Correct answer: 2 marks	2	
	2.4	27°C – (- 1°C) = 27°C + 1°C✓  = 28°C  The temperature rose by 28°C✓	Correct method: 1 mark  Correct answer: 1 mark  Correct answer only: 2 marks	2	
	2.5	- 16 + (- 2) + (-12) ÷ (- 4)  = - 16 + (- 2) + 3 ✓  = -18 +3  = - 15✓	Correct method: 1 mark  Correct answer: 1 mark	2	

	2.6	<p><i>Interest: 15% Of R1 500</i></p> $= \frac{15}{100} \times R1\ 500$ $= R225 \checkmark$ <p><i>Total amount = R1 500 + R225</i></p> $= R\ 1\ 725 \quad \checkmark\checkmark$	<p><i>Correct interest: 1 mark</i></p> <p><i>Correct answer: 2 marks</i></p>	3	
3	3.1	$\sqrt[3]{64a^3}$ $= 4a \checkmark$	<p><i>Correct answer: 1 mark</i></p>	1	
	3.2	$6^2 + \sqrt{9^2} - 1^3$ $= 36 + 9 - 1 \checkmark$ $= 44 \checkmark$	<p><i>Correct method: 1 mark</i></p> <p><i>Correct answer: 1 mark</i></p>	2	
	3.3	<p>4 170 0000</p> $= 4,1 \times 10^7 \checkmark$	<p><i>Correct answer: 1 mark</i></p>	1	
	3.4.1	$\frac{2}{7} \div \frac{1}{3}$ $= \frac{2}{7} \times \frac{3}{1} \checkmark$ $= \frac{6}{7} \checkmark$	<p><i>Correct method: 1 mark</i></p> <p><i>Correct answer: 1 mark</i></p>	2	
	3.4.2	<p>5% of 800</p> $= \frac{5}{100} \times 800$ $= 40\% \checkmark$	<p><i>Correct answer: 1 mark</i></p>	1	
	3.4.3	<p>0,55 ÷ 0,11</p> $= \frac{55}{100} \div \frac{11}{100}$ $= \frac{55}{100} \times \frac{100}{11} \checkmark$ $= 5 \checkmark$	<p><i>Correct method: 1 mark</i></p> <p><i>Correct answer: 1 mark</i></p>	2	

	3.4.4	<p><i>Amount decreased:</i></p> $R25 - R20 = R5 \checkmark$ $\therefore \% \text{ decrease} = \frac{5}{25} \times 100 \checkmark$ $= 20\%$ <p>The % decrease is 20% ✓</p>	<p><i>Correct method: 2 marks</i></p> <p><i>Correct answer: 1 mark</i></p>	3	<b>[12]</b>
4	4.1.1	$3x - 2y + 4 - 3x - y + 2$ $= -3x - 3x - 2y - y + 4 + 2 \checkmark$ $= 0 - 3y + 6$ $= -3y + 6 \checkmark$	<p><i>Correct method: 1 mark</i></p> <p><i>Correct grouping of like terms: 1 mark</i></p>	2	
	4.1.2	$\frac{15x^2 - 10x - 5}{5}$ $= \frac{15x^2}{5} - \frac{10x}{5} - \frac{5}{5} \checkmark$ $= 3x^2 - 2x - 1 \checkmark \checkmark$	<p><i>Correct method: 1 mark</i></p> <p><i>Correct answer: 2 marks</i></p> <p><i>Correct answer only: 3 marks</i></p>	3	
	4.2	$x^3 - 2x^2 + x - 5$ $= x^3 - 2x^2 + x - 5$ $= (-1)^3 - 2(-1)^2 + (-1) - 5 \checkmark$ $= -1 - 2 - 1 - 5 \checkmark$ $= -9 \checkmark$	<p><i>Correct substitution: 1 mark</i></p> <p><i>Removal of brackets: 1 mark</i></p> <p><i>Correct answer: 1 mark</i></p>	3	
	4.3.1	$5x - 4 = 26$ $5x - 4 + 4 = 26 + 4 \checkmark$ $5x = 30$ $x = \frac{30}{5}$ $= 6 \checkmark$	<p><i>Correct method (additive &amp; multiplicative): 1 mark</i></p> <p><i>Correct answer: 1 mark</i></p>	2	

	4.3.2	$5^{x+1} = 125$ $\therefore 5^{x+1} = 5^3 \checkmark$ $\therefore x + 1 = 3 \checkmark$ $\therefore x = 2 \checkmark$	<i>Correct method: 2 marks</i>  <i>Correct answer: 1 mark</i>	3	
	4.4	$A = 1 \checkmark$ $B = 4 \checkmark$	<i>Correct answer for each: 1 mark</i>	2	
	4.5.1	$y = 3x + 2 \checkmark$	<i>Correct answer: 1 mark</i>	1	
	4.5.2	<i>Input = 10</i> $\checkmark \checkmark$	<i>Correct answer: 2 marks</i>	2	
5	5.1	36; 49 $\checkmark \checkmark$	<i>Correct answer for each: 1 mark</i>	2	
	5.2.1	15 $\checkmark$	<i>Correct answer: 1 mark</i>	1	
	5.2.2	$5 + 4 + 3 + 2 + 1 \checkmark$			

**5.3**



*Correct plotting of points: 2 marks*

*Correct straight line: 1 mark*