



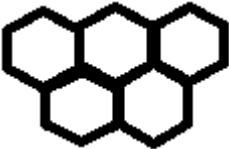
Hoërskool Dr. Johan Jurgens
Mathematics
Grade 8
November 2025
Paper 1
MARKING GUIDELINE

Examiner: Ms. C. Giezing
Moderator: Ms. M. Botha

Time: 1 Hour 30 minutes
Date: November 2025
Total: 60 marks

Question 1	Answer	Mark Allocation	Cognitive levels	Level
1.1.	B (50 000 000 + 7 000 000 + 200 000 + 40 000 + 3000 + 100 + 70 + 6) ✓	1 ✓ Answer	Knowledge	Easy
1.2.	B (-17) ✓	1 ✓ Answer	Routine Procedure	Easy
1.3	D ($\frac{1}{3}$) ✓	1 ✓ Answer	Routine Procedure	Easy
1.4	C (3) ✓	1 ✓ Answer	Knowledge	Easy
1.5	A (20) ✓	1 ✓ Answer	Knowledge	Easy
		[5]		
Question 2	Answer	Mark Allocation	Cognitive Level	Level
2.1.	13: 13 39: 13 x 3 ✓ LCM: 13 x 3 = 112 ✓ HCF: 13 ✓	3 ✓ Showing of the prime numbers ✓ LCM Answer ✓ HCF Answer	Routine Procedure	Easy
2.2	112% x R180 ✓ $= \frac{112}{100} \times 180$ ✓ $= R201,60$ ✓	3 ✓ Number sentence ✓ Calculation ✓ Answer	Problem Solving	Moderate
		[6]		
Question 3	Answer	Mark Allocation	Cognitive Level	Level
3.1	$3 + (-5) - (-4) + 18$ $= 3 - 5 + 4 + 18$ $= 20$	2 ✓ Method ✓ Answer	Knowledge	Moderate
3.2	$\sqrt{36 * 9} + \sqrt{16 + 9}$ $= \sqrt{324} + \sqrt{25}$ ✓ $= 18 + 5$ ✓ $= 23$ ✓	3 ✓ calculating the answers ✓ Method ✓ Answer	Routine Procedure	Moderate
		[6]		

Question 4	Answer	Mark Allocation	Cognitive Level	Level
4.1	$4 \times \frac{1}{2} \div \frac{8}{10}$ $= \frac{4}{1} \times \frac{1}{2} \times \frac{10}{8} \checkmark$ $= \frac{1}{1} \times \frac{1}{1} \times \frac{5}{2}$ $= \frac{5}{2} \text{ or}$ $= 2\frac{1}{2} \checkmark$	2 ✓ Method ✓ Simplified answer	Knowledge	Easy
4.2	$49l \div 3\frac{1}{2}l$ $= \frac{49}{1} \div \frac{7}{2} \checkmark$ $= \frac{49}{1} \times \frac{2}{7}$ $= \frac{1}{1} \times \frac{2}{1} \checkmark$ $= 14 \text{ weeks} \checkmark$	3 ✓ place 49 on 1 and the receptacle of mix fraction Divide by 7 ✓ Multiply ✓ Answer	Routine Procedure	Difficult
		[5]		
Question 5	Answer	Mark Allocation	Cognitive Level	Level
5.1	$17,30 \times 100$ $= 1730 \checkmark$	1 ✓ Method and Answer	Knowledge	Easy
5.3	$1,44 \div 0,12$ $= (1,44 \times 100) \div (0,12 \times 100) \checkmark$ $= 144 \div 12 \checkmark$ $= 12 \checkmark$	3 ✓ x 100 ✓ Method ✓ Answer	Routine Procedure	Moderate
		[7]		
Question 6	Answer	Mark Allocation	Cognitive Level	Level
6.1.1	$x^3 \cdot x^4$ $= x^{3+4}$ $= x^7 \checkmark$	1 ✓ Answer	Knowledge	Easy
6.1.2	$5^0 \times 3^4$ $= 1 \times 3^4 \checkmark$ $= 3^4 \checkmark$	2 ✓ Number to the power 0 ✓ Answer	Routine Procedure	Moderate

6.2	$2^3 \times 2^7 \div \sqrt[3]{8}$ $= 2^3 \times 2^7 \div 2 \checkmark$ $= 2^{3+7-1} \checkmark$ $= 2^9 \checkmark$	3 \checkmark Simplify \checkmark Apply law 1 and 2 \checkmark Answer	Routine Procedure	Moderate										
		[6]												
Question 7	Answer	Mark Allocation	Cognitive Level	Level										
7.1		1 \checkmark Next pattern	Knowledge	Easy										
7.2	<table border="1" data-bbox="402 693 828 766"> <tbody> <tr> <td>N</td> <td>4</td> <td>5</td> <td>6</td> </tr> <tr> <td>s</td> <td>18\checkmark</td> <td>22\checkmark</td> <td>26\checkmark</td> </tr> </tbody> </table>	N	4	5	6	s	18 \checkmark	22 \checkmark	26 \checkmark	3 \checkmark Answer 18 \checkmark Answer 22 \checkmark Answer 26	Routine Procedure	Difficult		
N	4	5	6											
s	18 \checkmark	22 \checkmark	26 \checkmark											
7.3.	$S = 4n + 2 \checkmark\checkmark$	2 $\checkmark\checkmark$ The rule correctly determined	Complex Procedure	Moderate										
		[6]												
Question 8	Answer	Mark Allocation	Cognitive Level	Level										
8.1	$X 3 - 5 \checkmark\checkmark$	2 $\checkmark\checkmark$ The rule correctly determined	Knowledge	Easy										
8.2	<table border="1" data-bbox="402 1354 828 1470"> <tbody> <tr> <td>-4</td> <td>-3</td> <td>-2</td> <td>-1</td> <td>0</td> </tr> <tr> <td>33</td> <td>19\checkmark</td> <td>9</td> <td>3</td> <td>1\checkmark</td> </tr> </tbody> </table> <p>Learner must use the rule Given to calculate answers</p>	-4	-3	-2	-1	0	33	19 \checkmark	9	3	1 \checkmark	2 $\checkmark\checkmark$ 1 Mark per answer	Complex Procedure	Difficult
-4	-3	-2	-1	0										
33	19 \checkmark	9	3	1 \checkmark										
		[4]												
Question 9	Answer	Mark Allocation	Cognitive Level	Level										
9.1.1	6 \checkmark	1 \checkmark for the coefficient	Knowledge	Easy										

9.1.2	1 ✓	1 ✓ for the exponent	Routine Procedure	Easy
9.2	$(3a + 4b) + (-2a + b)$ $= 3a + 4b - 2a + b$ ✓ $= a + 5b$ ✓	2 ✓ Correct calculation ✓ Answer	Routine Procedure	Easy
9.3.1	$= 3ab^3$ ✓ $\sqrt[3]{27a^3b^9}$	1 ✓ Answer	Complex Procedure	Easy
9.3.2	$= 9x^2y^3$ $\sqrt{81x^4y^6}$	1 ✓ Answer	Complex Procedure	Easy
9.3.3	$\frac{-15gh^2 + 9gh}{3gh}$ $= \frac{-15gh^2}{3gh} + \frac{9gh}{3gh}$ ✓ $= -5h + 3$ ✓✓	3 ✓ Method ✓✓ Answer	Complex Procedure	Easy
		[9]		
Question 10	Answer	Mark Allocation	Cognitive Level	Level
10.1	$X = 4$ ✓	1 ✓ Answer	Knowledge	Easy
10.2	$5x + 3 = 2x - 3$ $5x - 2x = -3 - 3$ ✓ $3x = -6$ $X = 3$ ✓	2 ✓ Method ✓ Answer	Routine Procedure	Moderate
10.3	$2x^3 = 16$ $x^3 = 16 \div 2$ $\sqrt[3]{x^3} = \sqrt[3]{8}$ ✓ $X = 2$ ✓	2 ✓ Method ✓ answer	Knowledge	Moderate
		[5]		
Question 11	Answer	Mark Allocation	Cognitive Level	Level
11.1	132 Hotdogs	1 ✓ Answer	Knowledge	Easy
11.2	84 more hotdogs were sold	1 ✓ Answer	Knowledge	Easy
11.3	168 hotdogs were sold	1 ✓ Answer	Knowledge	Easy
11.4	$2+4+7+5+3+1+8 = 30$ $30 \times 2 = 60$ $60 \times 12 = 720$	2 ✓ Method ✓ Answer	Routine Procedure	Moderate
		[5]		

Knowledge	Routine Procedure	Complex Procedure	Problem Solving
15	28	11	6
25%	47%	18%	10%

Total: 60