



GAUTENG PROVINCE
EDUCATION
REPUBLIC OF SOUTH AFRICA

**GAUTENG DEPARTMENT OF EDUCATION
PROVINCIAL EXAMINATION
JUNE 2019
GRADE 6**

MATHEMATICS

MEMORANDUM

7 pages

**GAUTENG DEPARTMENT OF EDUCATION
PROVINCIAL EXAMINATION**

MATHEMATICS

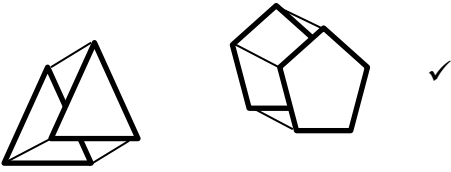
General marking note:

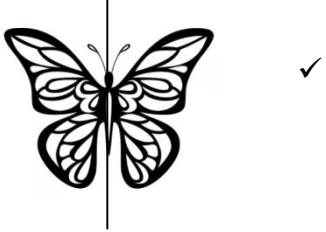
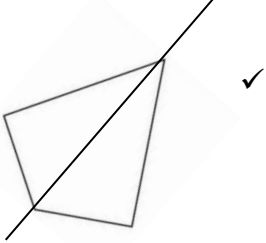
1. Give full marks for answers only, unless otherwise stated.
2. Accept any alternative correct solution that is not included in the memorandum.
3. CA refers to consistent accuracy. See clarification in Question 2.3.

QUESTION		EXPECTED ANSWER	CLARIFICATION	M A R K	TOTAL
1	1.1	B✓		1	
	1.2	C✓		1	
	1.3	D✓		1	
	1.4	D ✓		1	
	1.5	A✓		1	
	1.6	A✓		1	
	1.7	C✓		1	
	1.8	B✓		1	
	1.9	A✓		1	
	1.10	D✓		1	
	1.11	B✓		1	
	1.12	C✓		1	
	1.13	B✓		1	
	1.14	D✓		1	

	1.15	A✓		1	
	1.16	B✓		1	
	1.17	B✓		1	
	1.18	D✓		1	
	1.19	A✓		1	
	1.20	D✓		1	20
2	2.1	$\begin{array}{r} 395\ 206 \\ +213\ 671 \\ \hline 608\ 877 \\ \checkmark \quad \checkmark \end{array}$	<p>Correct answer: 2 marks</p> <p>877: 1 mark 608: 1 mark</p> <p>Accept any other correct alternative method.</p>	2	
	2.2	$\begin{array}{r} 666\ 888 \\ -438\ 207 \\ \hline 228\ 681 \\ \checkmark \quad \checkmark \end{array}$	<p>Correct answer: 2 marks</p> <p>681: 1 mark 228: 1 mark</p> <p>Accept any other alternative correct method.</p>	2	
	2.3	$\begin{array}{r} 6\ 402 \\ \times 52 \\ \hline 12\ 804\checkmark \\ +320\ 100\checkmark \\ \hline 332\ 904\checkmark \end{array}$ <p>Example of CA:</p> $\begin{array}{r} 6\ 402 \\ \times 52 \\ \hline 12\ 804\checkmark \text{ (6 402 } \times 2 \text{ correct)} \\ + 30\ 100\text{✗} \text{ (6 402} \times 50 \text{ incorrect)} \\ \hline 42\ 904\checkmark \text{ (previous steps correctly added)} \end{array}$	<p>Correct answer: 3 marks</p> <p>12 804: 1 mark 320 100: 1 mark Correctly adding steps: 1 mark</p> <p>Accept any other alternative correct method including Napier's Bones method.</p> <p>Apply CA</p>	3	

2.4	$ \begin{array}{r} \checkmark \quad \checkmark \quad \checkmark \\ \underline{203 \text{ rem } 4} \\ 32 \overline{) 6500} \\ \underline{-64} \\ 10 \\ \underline{-0} \\ 100 \\ \underline{-96} \\ \underline{4} \end{array} $	<p>Correct answer 3 marks</p> <p>2: 1 mark 03: 1 mark Remainder 4 : 1 mark</p> <p>Apply CA</p> <p>Accept any other alternative correct method.</p>	3
2.5	$ \begin{aligned} &= 2\frac{2}{17} + 6\frac{9}{17} \\ &= 8\checkmark\frac{11}{17}\checkmark \end{aligned} $	<p>Correct answer: 2 marks</p> <p>8 : 1 mark</p> <p>$\frac{11}{17}$: 1 mark</p> <p>Apply CA</p>	2
2.6	$ \begin{aligned} &\frac{22}{27} - \frac{21}{27}\checkmark \\ &\frac{1}{27}\checkmark \end{aligned} $	<p>Correct answer: 2 marks</p> <p>Making the fractions equivalent: 1 mark</p> <p>$\frac{1}{27}$: 1 mark</p> <p>Accept any other alternative correct method, and any answer that is equivalent.</p> <p>Apply CA</p>	2
2.7	$18 \div 3 \times 2 \checkmark = 12\checkmark$	<p>Correct answer: 2 marks</p> <p>Relevant calculation: 1 mark</p> <p>12 : 1 mark</p>	2

2.8	$\begin{array}{r} 35,09 \\ + 0,7 \\ \hline 35,79 \end{array}$	<p>Correct answer: 2 marks</p> <p>Correct place value: 1 mark</p> <p>35,79: 1 mark</p> <p>No marks to be awarded for the final answer if there is no comma.</p>	2				
2.9	250 ✓		1				
2.10	$= 54 - 4 \checkmark$ $= 50 \checkmark$	<p>Correct answer: 2 marks</p> <p>Dividing first: 1 mark</p> <p>50: 1 mark</p> <p>Accept any alternative correct method.</p>	2	21			
3	3.1	<table border="1"> <tbody> <tr> <td>Parallelogram ✓</td> <td>Cylinder ✓</td> <td>Square / rectangular pyramid ✓</td> </tr> </tbody> </table>	Parallelogram ✓	Cylinder ✓	Square / rectangular pyramid ✓	3	
Parallelogram ✓	Cylinder ✓	Square / rectangular pyramid ✓					
	3.2	$7 - 5 \checkmark = 2 \checkmark$ OR  Difference = 2 ✓	2				
	3.3	A: Acute ✓ B: Obtuse ✓ C: Reflex ✓	3	8			

4	4.1		No marks may be awarded if the learner drew additional lines. Do not penalize the learner for not using a ruler.	1													
	4.2			1	2												
5		Input: 89 Rule: +6 Output: 103	89: 1 mark + 6: 1 mark 103: 1 mark The rule must consist of an operation and a number, if the learner only writes "6" as the rule, the mark cannot be awarded. Apply CA		3												
6		<table border="1" data-bbox="320 1330 868 1469"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>12</td> <td>29✓</td> </tr> <tr> <td>3</td> <td>5</td> <td>7</td> <td>9✓</td> <td>25✓</td> <td>59</td> </tr> </table>	1	2	3	4	12	29✓	3	5	7	9✓	25✓	59	9: 1 mark 25: 1 mark 29: 1 mark		3
1	2	3	4	12	29✓												
3	5	7	9✓	25✓	59												
7	7.1	18:42 ✓		1													
	7.2	1 Hour ✓ and 21 minutes✓	1 hour✓ 21 minutes✓	2	3												
8	8.1	09:20✓		1													
	8.2	16:10✓		1	2												
9	9.1	3,65✓		1													
	9.2	56✓		1	2												

10		2 500 ✓ ml – 1300 ml = 1 200 ml ✓ OR 2,5 L – 1,3 L ✓ = 1,2 L ✓	Correct answer: 2 marks. Convert so that units are the same: 1 mark 1 200 ml or 1,2 L: 1 mark		2										
11	11.1	The tuckshop ✓		1											
	11.2	R15 ✓		1	2										
12		<p>Types of pets ✓</p> <table border="1"> <caption>Data from Bar Chart: Types of pets</caption> <thead> <tr> <th>Pet Type</th> <th>Number of Pets</th> </tr> </thead> <tbody> <tr> <td>Dog</td> <td>15</td> </tr> <tr> <td>Cat</td> <td>7</td> </tr> <tr> <td>Bird</td> <td>11</td> </tr> <tr> <td>No Pets</td> <td>3</td> </tr> </tbody> </table>	Pet Type	Number of Pets	Dog	15	Cat	7	Bird	11	No Pets	3	Suitable heading: 1 mark Accurate drawing of any bar according to relevant intervals: 1 mark		2
Pet Type	Number of Pets														
Dog	15														
Cat	7														
Bird	11														
No Pets	3														
13		$105 \times 5 \checkmark = 525 \checkmark \text{ km}$	Correct answer: 2 marks $\times 5$: 1 mark 525: 1 mark		2										
14		R100,00 – R87,50 ✓ R12,50 ✓	Correct answer: 2 marks R100,00 – R87,50 ✓ R12,50 ✓		2										
15		$\frac{4}{15}$ Or $\frac{8}{30}$ Or $\frac{16}{60}$ ✓	Correct answer: 1 mark Accept any equivalent answer.		1										
TOTAL:					75										