GAUTENG PROVINCE
EDUCATION
REPUBLIC OF SOUTH AFRICA

GAUTENG DEPARTMENT OF EDUCATION

PROVINCIAL EXAMINATION

JUNE 2018

GRADE 6

MATHEMATICS

MEMORANDUM

9 pages

MEMORANDUM	MATHEMATICS GRADE 6

GAUTENG DEPARTMENT OF EDUCATION

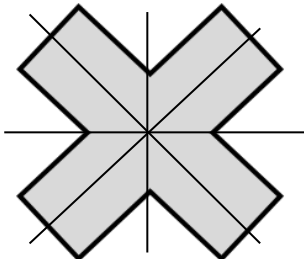**PROVINCIAL EXAMINATION**

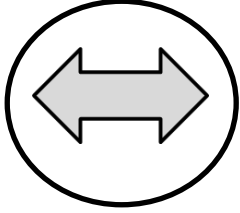**MATHEMATICS**

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 3.3.

QUESTION		EXPECTED ANSWER	CLARIFICATION	MARK	TOTAL
1	1.1	C✓		1	
	1.2	C✓		1	
	1.3	D✓		1	
	1.4	B✓		1	
	1.5	B✓		1	
	1.6	A✓		1	
	1.7	D✓		1	
	1.8	D✓		1	
	1.9	A✓		1	
	1.10	A✓		1	10
2	2.1	4 8 7 3 5 6 + 2 5 6 1 0 3 7 4 3 4 5 9 ✓ ✓	Correct answer: 2 marks 743: 1 mark 459: 1 mark Accept any other alternative correct method.	2	

QUESTION	EXPECTED ANSWER	CLARIFICATION	MARK	TOTAL
2.2	5 1 2 7 5 8 − 2 8 5 4 2 1 2 2 7 3 6 4 ✓ ✓	Correct answer: 2 marks 227: 1 mark 364: 1 mark Accept any other alternative correct method	2	
2.3	3 2 1 4 × 5 1 3 2 1 4✓ + 1 6 0 7 0 0 ✓ 1 6 3 9 1 4 ✓ Example of CA: 3 2 1 4 × 5 1 3 2 1 4 ✓ (3 214 × 1 correct) +1 6 0 7 0 ✗ (3 214 × 50 incorrect) 1 9 2 8 4 ✓ (previous steps correctly added)	Correct answer: 3 marks 3 214: 1 mark 160 700: 1 mark Correctly adding steps: 1 mark Accept any other alternative correct method including Napier's Bones method Apply CA	3	

2.4	✓✓ ✓
	       3 0 6 rem 21
	24 ⟌ 7 3 6 5
	− 7 2
	       1 6 5
	− 1 4 4
	         2 1
		Correct answer 3 marks
		
		3: 1 mark
		0: 1 mark
		Remainder 21 : 1 mark
		
		Accept any other alternative correct method
		
		Apply CA
			3	

QUESTION	EXPECTED ANSWER	CLARIFICATION	MARK	TOTAL
2.5	$= \frac{4}{15} + \frac{9}{15}$ ✓ $= \frac{13}{15}$ ✓	Correct answer: 2 marks $\frac{9}{15}$: 1 mark $\frac{13}{15}$: 1 mark Apply CA	2	
2.6	$= 2\frac{1}{4} - \frac{3}{4}$ ✓ $= 1\frac{2}{4}$ ✓ or $1\frac{1}{2}$ or: $= \frac{13}{4} - \frac{7}{4}$ ✓ $= \frac{6}{4}$ ✓ OR $1\frac{2}{4}$ OR $1\frac{1}{2}$ OR $\frac{3}{2}$	Correct answer: 2 marks Subtracting the whole numbers: 1 mark Subtracting the fractions: 1 mark OR Convert to improper fractions: 1 mark Correctly subtract: 1 mark Accept any other alternative correct method, and any answer that is equivalent Apply CA	2	
2.7	$= 450 \div 10 \times 7$ $= 45 \times 7$ ✓ $= 315$ ✓	Correct answer: 2 marks Divide by 10 : 1 mark Multiply by 7 : 1 mark Apply CA	2	

QUESTION		EXPECTED ANSWER	CLARIFICATION	MARK	TOTAL
	2.8	$\begin{array}{r} 3\,4\,,\,2\,5 \\ +\quad 4\,,\,5 \\ \hline 3\,8\,,\,7\,5 \end{array}$ ✓ ✓	Correct answer: 2 marks Correct place value: 1 mark 38,75 : 1 mark No marks to be awarded for the final answer if there is no comma	2	
	2.9	95 ✓ %	95 : 1 mark Do not penalize the learner for not writing the % sign	1	
	2.10	= 15 + 10 ✓ × 10 = 115✓	Correct answer: 2 marks Answering the bracket first: 1 mark 115: 1 mark Accept any alternative correct method	2	21
3	3.1	< ✓		1	
	3.2	= ✓		1	
	3.3	> ✓		1	3
4	4.1	4 ✓ OR	4 : 1 mark Award the mark if learners have drawn the lines of symmetry instead of writing the number of lines	1	
					2

QUESTION		EXPECTED ANSWER	CLARIFICATION	MARK	TOTAL
	4.2	✓	The double sided arrow circled: 1 mark No marks if any other shape is circled	1	
5		Rectangular prism ✓ 6 ✓ 8 ✓	Name - Rectangular prism : 1 mark 6 faces : 1 mark 8 vertices : 1 mark		3
6	6.1	Pentagon ✓		1	
	6.2	A – Obtuse ✓ B – Acute ✓		2	3
7	7.1	**Rectangles have right angles**, ✓ Parallelograms have acute and obtuse angles OR **Rectangles have 4 equal angles**,✓ parallelograms have opposite angles which are equal	Accept any alternative correct answer	1	
	7.2	They are both **quadrilaterals** (have 4 sides) ✓ OR They both have **opposite sides equal** ✓ OR They both have **opposite angles equal** ✓	Accept any alternative correct answer	1	2

QUESTION		EXPECTED ANSWER	CLARIFICATION	MARK	TOTAL
8	8.1	2 ✓ Litres	2 : 1 mark	1	
	8.2	14 200 ✓ Litres	14 200 : 1 mark	1	
	8.3	345 ✓ minutes	345 : 1 mark	1	3
9	9.1	2 800 ml ✓ − 1 500 ml = 1 300 ml✓ OR 2,8 ℓ – 1,5 ℓ ✓ = 1,3 ℓ ✓	Correct answer: 2 marks Converting so that the units are the same : 1 mark 1,3 ℓ or 1 300 ml : 1 mark	2	
	9.2	340 years – 300 years ✓ = 40 ✓ years	Converting to years : 1 mark 40 years : 1 mark Accept any alternative correct method Apply CA	2	4
10	10.1	2 ✓ hours		1	
	10.2	6 pm ✓ OR 18:00		1	
	10.3	Sudan ✓		1	3
11		21 ✓			1
12	12.1	☐ ✓ OR Square/Rectangle	Accept the drawing or name of the shape	1	
	12.2	△ ✓ OR Triangle	Accept the drawing or name of the shape	1	2

QUESTION		EXPECTED ANSWER	CLARIFICATION	MARK	TOTAL
13	13.1	5 ✓		1	
	13.2	36 ✓		1	
	13.3	House number 6 ✓		1	3
14		 	Grade	Tally	Frequency
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6	̶H̶̶H̶T̶ ̶H̶H̶T̶ II	12 ✓
7	̶H̶H̶T̶ IIII ✓	9		12 : 1 mark ̶H̶H̶T̶ IIII : 1 mark		2
15	15.1	Elijah ✓		1	
	15.2	16 ✓ Hours		1	
	15.3	Time spent by Zak Sports ✓ School Homework ✓		2	4
16		+1 ✓ 16 ✓			2

17		120 km : 60 minutes ✓
		  2 km : 1 minute
		  1 km : 30 seconds
		
		OR 1000 metres
			Correct answer :
			2 marks
			
			Convert hour into minutes or attempt a T table or rate calculation : 1 mark
			
			1 km or 1 000 m: 1 mark
					2

	MEMORANDUM	MATHEMATICS GRADE 6

QUESTION	EXPECTED ANSWER	CLARIFICATION	MARK	TOTAL
18	8 x R5,50 = R44✓ R44 – R15✓ = R29 ✓	Correct answer: 2 marks Calculate total for a box : 1 mark Subtract R15 : 1 mark R29 : 1 mark Accept any alternative correct method Apply CA		3
19	21✓ and 33 ✓			2
			TOTAL:	**75**