

ANNUAL NATIONAL ASSESSMENTS 2013 GRADE 6 MATHEMATICS MEMORANDUM

MARKS: 75

This memorandum consists of 4 pages.

General marking note:

- Give full marks for answers only, unless otherwise stated.
 Accept any alternative correct solution that is not included in the memorandum.
- 3. CA refers to consistent accuracy. See clarification at 5.7.

QUESTION		EXPECTED ANSWER	CLARIFICATION	MARK	TOTAL
1	1.1	B/29 ✓		1	
	1.2	C / 9,11 🗸		1	
	1.3	D / 5,6 cm 🗸		1	
	1.4	A/6 🗸		1	
	1.5	C/40 🗸		1	
	1.6	A / 300 000 🗸		1	
	1.7	D/27 ✓		1	
	1.8	B / 325 ml ✓		1	
	1.9	B / $\frac{3}{8}$ ✓		1	
	1.10	B ✓		1	10
2		342 650 798 ✓	All digits must be		
			correct		1
3		31 🗸			1
4		40 000 000 🗸	The following		
			answers are also		
			acceptable.		
			40 M; forty million		
			4 TM		
			40 x 1 000 000		1
5	5.1	43 489	All digits must be		
		345 987	correct.		
		+ <u>307</u>	Answer only, all		
		389 783	digits correct, full		
		✓ ✓	marks.		
			783 ✓		
			389 ✓		
			Apply CA	2	
	5.2	495 089	All digits must be		
		<u> </u>	correct.		
		409 242	Answer only - all		
		√ ✓	digits correct, full		
			marks.		
			242 ✓		
			409 🗸		
			Apply CA		
			Apply CA		
				2	

QUE	STION	EXPECTED ANSWER	CLARIFICATION	MARK	TOTAL
	5.3	3 097	Accept any method		
		× <u>249</u>	that is		
		27 873 ✓	mathematically		
		123 880 🗸	correct. Apply CA.		
		<u>619 400</u> ✓	түргу От.		
		771 153 🗸		4	
	5.4	100 (
	5.4	109 ✓ 36)3 924			
		,			
		- <u>3 6</u> 🗸			
		324 - <u>324</u> ✓			
		000			
				3	
	5.5	$4\frac{1}{8} + 3\frac{3}{8}$	7 🗸		
			$\frac{4}{8}$		
		$7\frac{4}{8}$ \checkmark or $7\frac{1}{2}$ \checkmark	8		
		$7\frac{1}{8}$ \checkmark or $7\frac{1}{2}$ \checkmark	1		
			$7\frac{1}{2}$ is also		
			acceptable, but no		
			extra mark is		
			awarded for		
	5 0	000/ 1400	simplifying.	2	
	5.6	20% of 400	Answer only - all correct, full marks.		
		- ²⁰ (× 400 or 1 × 400 (correct, ruii marks.		
		$=\frac{20}{100}$ \checkmark x 400 or $\frac{1}{5}$ x 400 \checkmark	Apply CA		
		= 80 ✓ = 80 ✓			
		= 00 v		2	
	5.7	7,83 + 5,39 - 4,86	13,57 ^X – 4,86		
		= 13,22 ✓ − 4,86	= 8,71.		
			0.74		
		= 8,36	0,71 ✓		
		√ √	8 🗸		
			Award two marks for		
			CA.	3	18
6		3 🗸			1
7		4 ✓			1
8		Change = $R100 - (R65,81 + R18,23)$ = $R100 - R84,04$	Apply CA.		
		= R100 - R64,04 ✓ = R15,96 ✓			
		or			
		Change = R100 - R65,81 - R18,23			
		= R34,19 − R18,23 ✓			2

QUE	STION	EXPECTED ANSWER	CLARIFICATION	MARK	TOTAL
		= R15,96 ✓			
9		614 🗸			1
10		No ✓			1
11		Number of busses 12 r 5 ✓	Apply CA.		
		$= 785 \div 65 \checkmark \text{ or } 65)785$			
		= 12 rem 5 ✓ - <u>65</u>			
		135 ✓			
		- <u>130</u>			
		5			
		Number of busses needed = 13 ✓			3
12		Decimal Fraction = 0,2 ✓			
		Percentage = 75% ✓			
		Common Fraction $=\frac{1}{20}$ \checkmark			2
13		0,42 4,24 42,4 🗸			3
14		31 🗸	4 x 8 = 32		I
'-		31 7	32 - 1 = 31		1
15		Replace A with 10 ✓			-
		Replace B with – 2 ✓			2
16		14 🗸 🗸	1 x 1 square 9		
			2 x 2 squares 4		
			3 x 3 squares 1		
			9 + 4 + 1 = 14 If answer from 9 to		
			13 give 1 mark. ✓		2
17	17.1	Obtuse angle ✓	To give i mana. v	1	
	17.2	Right angle ✓		1	2
18		Stack number 1 2 3 4 6 8 ✓	1	'	2
		No. of cans 1 4 9 16 36 ✓ 64			0
19		No of vertices: 4 ✓			2
13		No of edges: 12 ✓			
		No of faces: 4 ✓			3
20		I			3
20					
		_			
					1

QUESTION		EXPECTED ANSWER	CLARIFICATION	MARK	TOTAL
21			length = 4 ✓		
			breadth = 2 ✓		
		✓ or			
					2
22	22.1	4 hours ✓		1	
	22.2	15:00 or 3.00 p.m. ✓	11 + 4 = 15		
			Apply CA	1	2
23	23.1	3 000 1 ✓		1	
	23.2	0,435 m ✓		1	2
24		R18, 95 x 2 = R37, 90 ✓	Apply CA.		
		or R36,95 ÷ 2 = R 18,475 ✓			
		Thus, 5 kg at R36,95 is a better buy. ✓			2
25		Difference = 37 °C − 28 °C = 9 °C ✓			1
26		Perimeter = $12 \times 1.5 m + 6 \times 1.5 m$	$3 \times 1.5 m = 4.5 m$		
		= 18 m + 9 m	$6 \times 1,5 = 9 m$		
		= 27 m ✓	13,5 <i>m</i> x 2 = 27 <i>m</i> ✓		
07	07.4	Direction of	Apply CA.	1	2
27	27.1 27.2	Bike riding. ✓		1	
	21.2	Difference in time spent = $80 h - 10 h$ = $70 h \checkmark$		1	2
28		25 ✓		'	1
29		Parallelogram ✓	Answer must be at		'
		Hexagon ✓	correct place.		2
30	30.1	32 ✓	8 x 4 = 32	1	
	30.2		3 clouds. Any	<u>'</u>	
	00.2	£\$ £\$ £\$\$ €\$\$	drawing with 3		
			clouds.	1	2
			I	1	
TOTAL:				75	