Province of the
EASTERN CAPE
EDUCATION

INTERMEDIATE PHASE

GRADE 6

NOVEMBER 2016

MATHEMATICS
MEMORANDUM

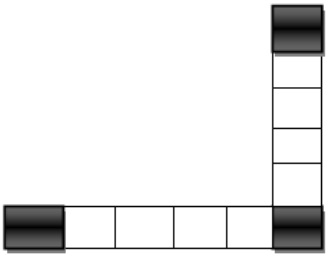
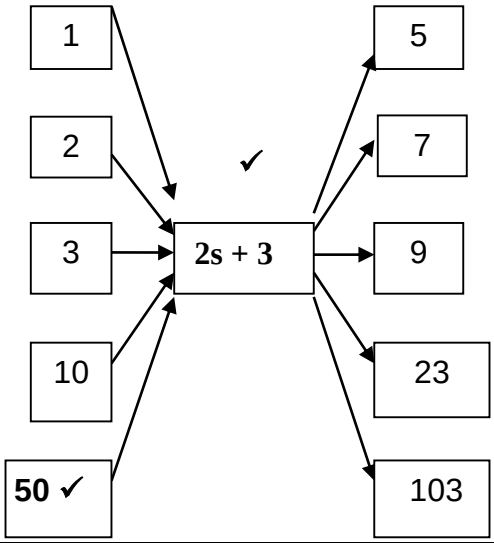
MARKS: 75

This memorandum has 5 pages.

INSTRUCTIONS AND INFORMATION

1. Give full marks for answers only, unless stated otherwise.
2. Accept any alternative correct solutions that are not included in the memorandum.
3. CA refers to consistent accuracy.

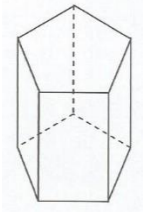
Questions		Expected answers	Clarification	Marks
1.	1.1	A / 245 000 ✓		1
	1.2	A / 7 456 ✓		1
	1.3	C / Acute angle ✓		1
	1.4	C/ 32,46 ✓		1
	1.5	B / 90 ✓		1
	1.6	B / 1h40min ✓		1
	1.7	D / 12 ✓		1
	1.8	C / 81 ✓		1
	1.9	C / 24 ✓		1
	1.10	C / 147 365 ✓		1
2.		89 mm ✓		1
3.		3 ✓		1
4.		866 463 – 324 587 541 876 pears were picked ✓	Accept any method that is mathematically correct. Apply CA.	1
5.		Piet. 10,07 seconds ✓		2
6.		R275,95 + R 25,50 R301,45 ✓✓	Accept any method that is mathematically correct. Apply CA.	1
7.	7.1	95% ✓		1
	7.2	$\frac{95}{100} \times \frac{40}{1}$ $\frac{3\,800}{100}$ = 38 learners ✓✓	Accept any method that is mathematically correct. Apply CA.	2
8.		3 500 g = 3,5 kg ✓ 9,75 kg – 3,5 kg = 6,25 kg ✓	Accept any method that is mathematically correct. Apply CA.	2
9.		2 × 60 = 120 sec + 24 sec = $\frac{144}{8}$ sec = 18 sec ✓✓	Accept any method that is mathematically correct. Apply CA.	2

10.	34 – 8 = 26 26 ÷ 2 = 13 ✓ **OR** 13 + 8 = 21✓ 21 + 13 = 34 × + × – 8 = 34 2x – 8 = 34 2x = 34 + 8 $\frac{2x}{2} = \frac{42}{2}$ ✓ × = 21✓ 34 – 21 = 13 Luleka is 21 years ✓ Lwando is 13 years ✓	Accept any method that is mathematically correct. Apply CA. Answers only: Luleka= 21✓✓ Lwando = 13✓✓	4
11.	11.1  ✓		1
	11.2 2 sides multiplied by the next stage then plus 3 existing squares ✓	Apply CA.	1
	11.3  ✓		2
	11.4 s = **15** ✓		1
12.	12.1 19 643 567 + 1 456 369 54 603 21 145 539 ✓✓	All digits must be correct. If answer only, still give full marks. 21 145 ✓ 539 ✓ Apply CA.	2
	12.2 6,00 – 3,24 2,76 ✓✓	All digits must be correct. If answer only, still give full marks. 6,00 ✓ 2,76 ✓ Apply CA.	2

	12.3	5 436 × 276 32 616 380 520 ✓✓ 1 087 200 1 500 336 ✓	Accept any method that is mathematically correct. Apply CA.	3
	12.4	315✓ 145 ⟌ 45 675 - 435 217 - 145 ✓ 725 - 725	Answer only is acceptable with full marks. Apply CA.	2
13.	John earned 3 parts of the money. Thabo earned 5 parts of the money. ∴ R400 ÷ 8 = R50 ✓ John gets 3 × R50 = R 150 ✓ Thabo gets 5 × R50 = R250 ✓		If answer only, still give full marks. Apply CA.	3
14.	14.1	⅓ × 24 hrs = 8 hrs ✓ ¼ × 24 hrs = 6 hrs ✓ 8 hrs + 6 hrs = 14 hrs ✓	Answer only is acceptable with full marks. Apply CA.	3
	14.2	⅙ × 24 hrs = 4 hrs ✓		1
15.	15.1	2 000 cm = (20 m + 30 m) × 2 = 100 m ✓		1
	15.2	100 m × R 20 = R 2 000 ✓		1
16.				3
17.	17.1	Parallelogram ✓		1
	17.2	0 or None ✓		1
	17.3	6 cm ✓		1

Common Fractions	Decimal Fractions	Percentages
½	0,5	50 %
$\frac{17}{100}$ ✓	0,17	**17 %** ✓
⅛	**0,125**✓	12,5 %

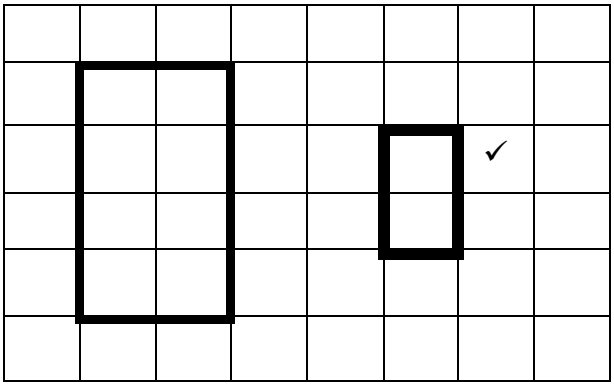
18.



Name of shape	**Pentagonal Prism ✓**
Number of faces	7
Number of vertices	**10 ✓**

2

19.



✓

1

20. Reflection or Mirror image or Flipping over along 180° ✓ — 1

21. C 1 ✓ — 1

22. 8 ✓✓ — 1 mark if answer is 4. 2 marks if answer is 8. — 2

23.

23.1	Minimum or the smallest possible quantity✓ Maximum or the largest possible quantity ✓	Apply CA — 2
23.2	Map A ✓ It has the highest temperatures ✓	Apply CA — 2

24. $\frac{2}{6} = \frac{1}{3}$ ✓ — Any of the two answers are acceptable — 1

25.

Sport	Tally marks	Frequency
Rugby	~~IIII~~ IIII ✓	9
Netball	~~IIII~~ I	6
Athletics	IIII	4
Soccer	I	1

1

26. 71 % ✓ — 1

27.

27.1	25 % ✓	1
27.2	$\frac{1}{12}$ ✓	1
27.3	$\frac{1}{12} \times \frac{R\ 480\ 000}{1} = \frac{R\ 480\ 000}{12}$ = R 40 000 ✓✓	2

TOTAL: 75

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