INTERMEDIATE PHASE

GRADE 6

NOVEMBER 2018

**MATHEMATICS
MARKING GUIDELINE**

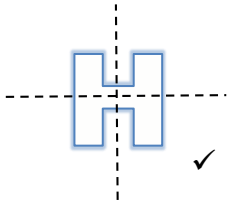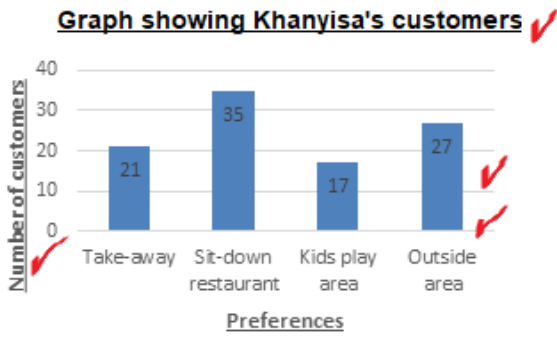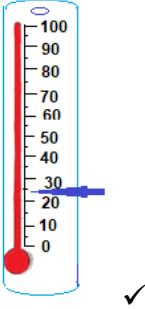**MARKS: 75**

GENERAL MARKING NOTES

1. Give full marks for answers only, unless stated otherwise.

2. Accept any alternative, correct solutions that are not included in the marking guideline.

	Questions		Expected answers		Clarification	Marks
1.	1.1		B ✓			1
	1.2		C ✓			1
	1.3		D ✓			1
	1.4		C ✓			1
	1.5		B ✓			1
	1.6		A ✓			1
	1.7		C ✓			1
	1.8		C ✓			1
	1.9		C ✓			1
	1.10		D ✓			1

2.	<table><tr><td>Red chairs</td><td>Yellow chairs</td><td>Blue chairs</td></tr><tr><td>8</td><td>$2 \times 8 = 16$</td><td>$16 - 3 = 13$</td></tr></table> $red\ chairs + yellow\ chairs\ + blue\ chairs$ 8 $\quad$ + $\quad$ 16 $\quad$ + $\quad$ 13 ✓✓ $\quad\quad = 37$ There 37 chairs in the classroom. ✓	2 Marks: Method 1 Mark: Answer Accept any other correct method.		3

3.	49 000 ✓		1
4.	4.1	9 752 ✓	1
	4.2	7 952 or 2 952 ✓	1
5.	0,75; 0,570; 0,5; 0,050 ✓		1
6.	6.1	Cylinder ✓	1
	6.2	Trapezium ✓	1

7.	7.1	✓✓		2
	7.2	The number of triangle increases by 1 from one step to the next. The number of squares increase in triangular numbers ✓✓		2
	7.3	7.3.1 10		1
		7.3.2 5		1
8.	8.1	$\overset{1}{5}\overset{1}{9}8\ \overset{1}{4}56$ $+\ \ \underline{458\ 105}$ $=\underline{1\ 056\ 561}$ ✓✓ **OR** (500 000 + 400 000) + (90 000 + 50 000) + (8 000 + 8 000) + (400 + 100) + (50 + 0) + (6 + 5) = 900 000 + 140 000 + 16 000 + 500 + 50 + 11 = 1 056 561	1 Mark: Answer 1 Mark: Ordering of the place values correctly. Accept any other correct method.	2
	8.2	$\overset{8}{9}\overset{14}{5}6\ \overset{1}{2}\overset{4}{5}\overset{1}{0}$ $-\ \ \underline{689\ 231}$ $=\underline{267\ 019}$ ✓✓ **OR** (900 000 − 600 000) + (50 000 − 80 000) + (6 000 − 9 000) + (200 − 200) + (50 − 30) + (0 − 1) = (800 000 − 600 000) + (140 000 − 80 000) + (16 000 − 9 000) + (200 − 200) + (40 − 30) + (10 − 1) = 200 000 + 60 000 + 7 000 + 000 + 10 + 9 = 267 019	1 Mark: Answer 1 Mark: Ordering of the place values correctly. Accept any other correct method.	2

8.3	3 590 x 621 3 590 71 800 ✓ 2 154 000 ✓ = 2 229 390 ✓ **OR** = 2 229 390 ✓✓✓	Any other correct method is acceptable	3

8.4	.. 32 rem 25
	120⟌3 865
	3 60 .
	265
	240
	25
	Answer = 32 remainder 25 ✓✓✓
	OR
	
	3 865 ÷ 120 =
	
	 3 865
	- 1 200 120 × 10
	 2 665
	- 1 200 120 × 10
	 1465
	 1 200 120 × 10
	  265
	  240 120 × 2
	rem 25 (10 + 10 + 10 + 2 = 32)
	Answer = 32 remainder 25 ✓✓✓
		Any other correct
		method is
		acceptable
			3

	8.5	$2\frac{3}{4} + 6\frac{1}{3} - 5\frac{3}{8}$ $= (2 + 6 - 5)\checkmark + (\frac{3}{4} + \frac{1}{3} - \frac{3}{8})$ $\checkmark$ $= 3 + (\frac{3\times 6}{4\times 6} + \frac{1\times 8}{3\times 8} - \frac{3\times 3}{8\times 3})$ $= 3 + (\frac{18}{24} + \frac{8}{24} - \frac{9}{24})$ $= 3 + (\frac{26}{24} - \frac{9}{24})$ $= 3\frac{17}{24}$ $\checkmark$ **OR** $3\frac{3}{4} + 5\frac{1}{2} - 3\frac{3}{8}$ $= (\frac{11}{4} + \frac{19}{3} - \frac{43}{8})$ $\checkmark$ $= (\frac{11\times 6}{4\times 6} + \frac{19\times 8}{3\times 8} - \frac{43\times 3}{8\times 3})$ $= \frac{66}{24} + \frac{152}{24} - \frac{129}{24}$ $\checkmark$ $= \frac{218}{24} - \frac{129}{24}$ $= \frac{89}{24}$ $= 3\frac{11}{24}$ $\checkmark$	1 Mark: Answer 2 Marks: Calculation. Accept any other correct method	3
	8.6	$20 \times (2 + 14) - 13$ $= 20 \times 16 - 13$ $= 320 - 13$ $\checkmark$ $= 307$ $\checkmark$	1 Mark: Any method 1 Mark: Answer	2
9.	9.1	30 $units$ $\checkmark\checkmark$	2 Marks: Answer	2
	9.2.	48 square units $\checkmark\checkmark$	2 Marks: Answer	2
10.		R2 240 $\checkmark$ ÷ 216 $\checkmark$ $= 10,37$ 1 pair of shoes R10,37 $\checkmark$	1 Mark: correct operation 1 Mark: substitution 1 Mark :Answer	3
11.		2 $\checkmark$ 5 $\checkmark$		2

12.		✓	1 Mark: Answer	1
13.	13.1	Triangles ✓ and square ✓	2 Mark: Answer	2
	13.2	5 vertices ✓	1 Mark: Answer	1
14.	14.1	21 + 35 + 17 + 27 = 100 customers ✓	1 Mark	1
	14.2		1 Mark: Heading 1 Mark: Axes 2 Marks correct plotting	4
	14.3	Sit-down restaurant ✓	1 Mark: Answer	1
15.	15.1	✓	1 Mark: Answer	1
	15.2	100 ℃ ✓	1 Mark: Answer	1
16.		VAT: R575 × $\frac{15}{100}$ ✓ = R86,25 ✓ Jacket + VAT R575 + R86,25 = R661,25	1 Mark: (Calculation) 1 Mark: Answer	2
17.		1 x 24 = 24 and 1 + 14 = 25 2 x 12 = 24 and 2 + 12 = 14 3 x 8 = 24 and 3 + 8 = 11 4 x 6 = 24 and 4 + 6 = 10 ✓ Therefore the correct answer is 3 and 8. ✓	1 marks: Any method: 1 Mark: Answer	2

18.	32 480 ✓✓		2 mark: Answer	2
19.	55 ÷ 1 000 ✓ = 0,055 *litres* ✓		2 mark: Answer	2
20.	20.1	8 ✓	1 mark: Answer	1
	20.2	2 ✓	1 mark: Answer	1
21.				
				2
22.	Time difference between Rio de Janeiro and Port Elizabeth is 5 hours. 11:00 + 5 hours = 15:00 or 3:00 pm ✓			1
23.	1 out of 12 or $\frac{1}{12}$ ✓			1
			TOTAL:	**75**