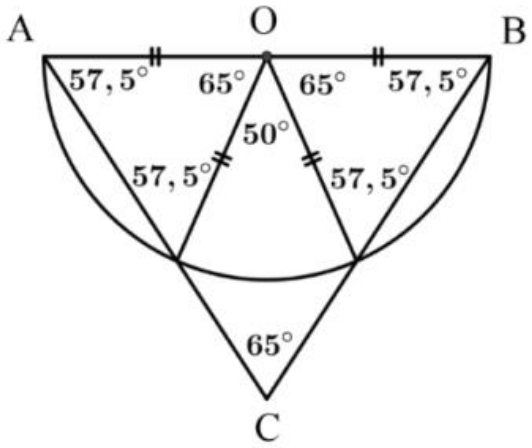
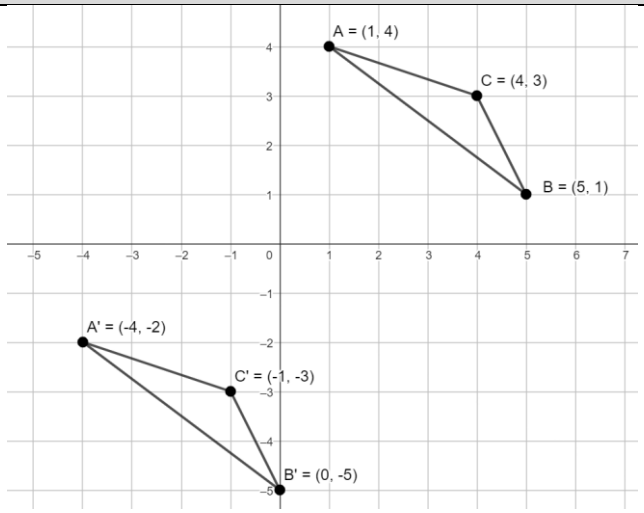
Grade 8 Paper 2 – MEMO

QUESTION	ANSWER	MARK ALLOCATION	MARKS	LEVEL
1.1.	$29^\circ C$	✓	1	K
1.2.	$22^\circ C$	✓	1	K
1.3.	$\frac{322}{14}$ $= 23^\circ C$	✓÷ ✓ans.	2	R
1.4.	$19;19;21;21;22;22;22;23;23;24;24;26;27;29$ $\therefore Median = \frac{22+23}{2}$ $= 22,5^\circ C$	✓ordered data ✓÷ 2 ✓ans.	3	R
1.5.	$29-19$ $=10^\circ C$	✓29 – 19 ✓ans.	2	R
TOTAL = 9 marks				
2.1.1.	$x+29^\circ = 360^\circ$ $(\angle's\ round\ a\ pt.)$ $\therefore x = 331^\circ$	✓reason ✓ans.	2	K
2.1.2.	$x = 58^\circ - 31^\circ$ $(ext.\angle of\ \Delta)$ $\therefore x = 27^\circ$ $y = 122^\circ$ $(\angle's\ on\ str.line)$ *OR* $(sum\ \angle's\ in\ \Delta)$	✓reason for x ✓x ✓Reason for y ✓y	4	R
2.1.3.	$x = 40^\circ$ $(corresp.\angle's;\|\|lines)$ $y = 54^\circ$ $(vert.opp.\angle's=)$ *OR* $(ext.\angle of\ \Delta)$ $z = 54^\circ$ $(alt.\angle's;\|\|lines)$ *OR* $(corresp.\angle's;\|\|lines)$	✓✓x with reason ✓✓y with reason ✓✓z with reason -1 if no ‖ lines	6	R
2.2.1.	$2x + 50^\circ + 90^\circ = 180^\circ$ $(\angle's\ on\ str.\ line)$ $\therefore 2x = 40^\circ$ $\therefore x = 20^\circ$	✓set up equation ✓reason ✓ans.	3	R
2.2.2.	$AQB + 29^\circ = 180^\circ$ $(co-int.\angle's;\|\|lines)$ $\therefore AQB = 151^\circ$	✓reason ✓ans.	2	K

2.2.3.	*In* ΔACQ *and* ΔADR : 1) A_1 *is a common / shared angle* 2) $RDA = QCA$ $(corresp.\angle's;\|\|lines)$ 3) $DRQ = CQA$ $(corresp.\angle's;\|\|lines)$ *OR* $(sum\,of\ \angle's\,in\,\Delta)$	✓$\hat{A}_1$ with reason ✓$R\hat{D}A = Q\hat{C}A$ ✓reason (corresp. $\angle's$) ✓D$\hat{R}Q = C\hat{Q}A$	4	C
2.3.	$OA = OB = OD = OE$ $(radii)$ $AOD = BOE = 65^\circ$ $(given)$ $OAD = ODA = OBE = OEB$ $(\angle's\,opp. = sides)$ $\therefore OAD = ODA = OBE = OEB = 57,5^\circ$ $(sum\angle's\,in\,\Delta)$ $\therefore x = 65^\circ$ $(sum\,of\ \angle's\,in\,\Delta)$  	✓radii ✓$\angle's$ opp. = sides ✓57,5° ✓x	4	PS
TOTAL = 25 marks				
3.1.1.	 	✓A'(-4;-2) ✓B'(0;-5) ✓C'(-1;-3)	3	R
3.1.2.	$A''(-1;4)$	✓-1 ✓4	2	K
3.1.3.	Both. The size of ΔABC has not changed, and so the shapes are identical.	✓Both ✓reason	2	K

3.2.	$a = -2$ $b = 0$	✓a ✓b	2	C
TOTAL = 10 marks				
4.1.	$2\pi r$ $= 2\pi(2)$ $= 12,57m$	✓sub ✓ans.	2	R
4.2.	Base length: $(10,63)^2 - (7)^2$ ($pythag.$) $= \sqrt{63,9969}$ $= 8m$ $Area = \frac{1}{2}(8)(7)$ $= 28m^2$	✓pythag. ✓8m ✓area sub. ✓ans.	4	C
4.3.	$Area\ of\ garden = 15 \times 7$ $= 105m^2$ $Area\ of\ pool = \pi(2)^2$ $= 12,566...m^2$ $Area\ of\ grass = 105 - 12,566... - 28$ $= 64,43m^2$	✓area garden ✓area of pool ✓subtract ✓ans.	4	C
4.4.	$4800cm^2 \div 60cm = 80cm$ $TSA = 2(4800) + 2(60 \times 150) + 2(80 \times 150)$ $= 9600 + 18000 + 24000$ $= 51600cm^2$	✓$80cm$ ✓$2(4800)$ ✓SA of remaining faces ✓ans.	4	C
4.5.	$Perimeter = 24cm$ $\therefore side\ length\ of\ l\arg e\ square = 24 \div 4$ $= 6cm$ $area\ of\ whole\ tile = 6 \times 6$ $= 36cm^2$	✓side length ✓6cm ✓area	3	C
TOTAL = 19 marks				