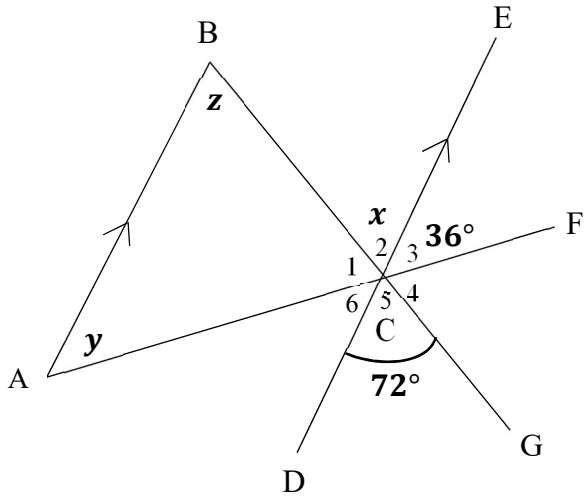
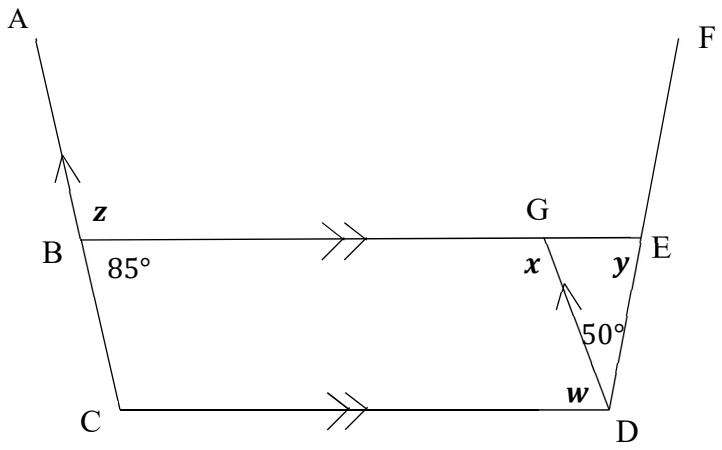
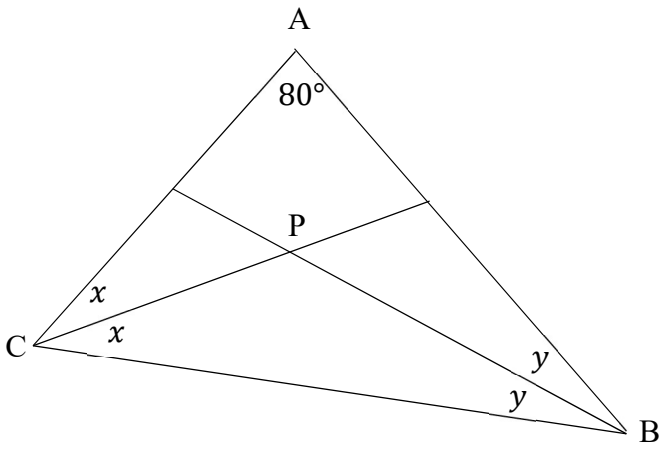
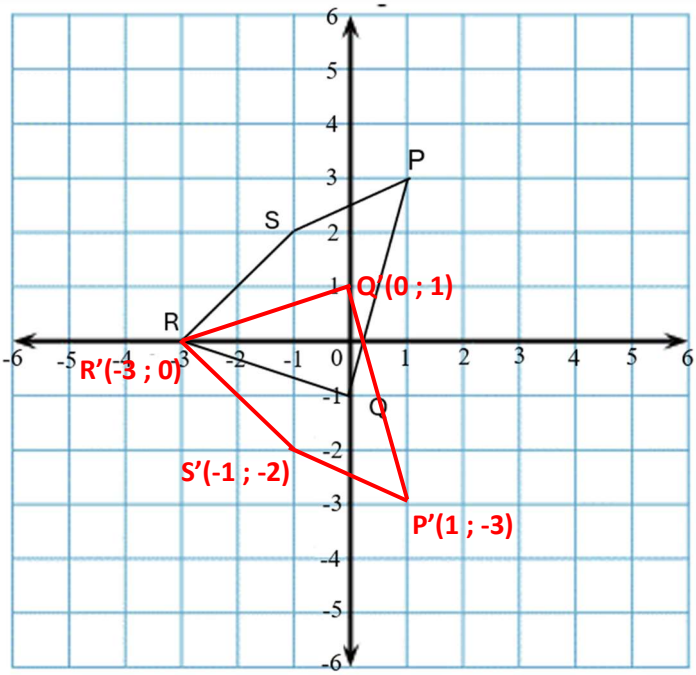
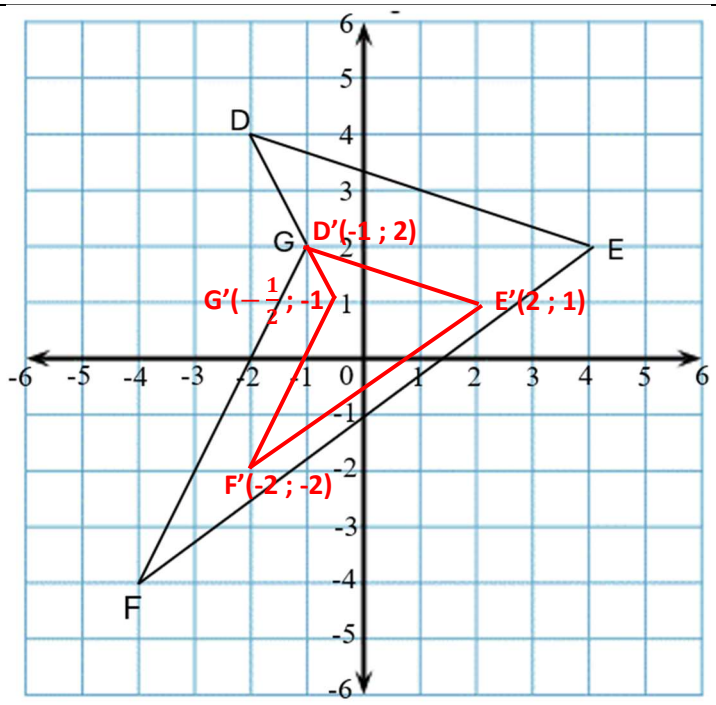
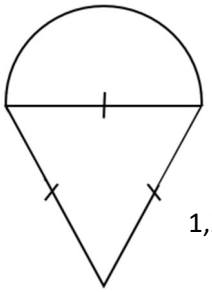
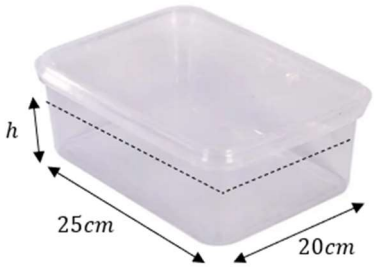
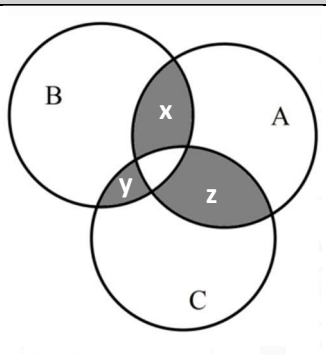
Question	Answer	Mark Allocation	Marks
1.1.	Free State	✓ *as long as FS is there, they can get 1 mark	1
1.2.	Mean $= \frac{797}{9}$ $= 88{,}56\%$	✓sum ✓÷ 9 ✓ans.	3
1.3.	$104 - 65$ $= 39$	✓ max ✓ min ✓ ans. (CA)	3
1.4.	55 ; 77 ; 82 ; 91 ; 96 ; 97 ; 99 ; 100 ; 100 ∴ median = 96	✓ arrange ✓ans.	2
1.5.	% change $= \frac{55-74}{74} \times 100$ $= -25{,}68\%$ or $25{,}68\%$ decrease	✓subtract ✓÷ 74 ✓ans.	3
TOTAL = 12 MARKS			
QUESTION 2 – Penalise ***once*** for no parallel lines; if ststaement is incorrect, no reason mark can be awarded.			
2.1.			
2.1.1.	$x = 72°$ (vert. opp. ∠'s =)	✓S ✓R	2
2.1.2.	$y = 36°$ (corresp. ∠'s; $AB \parallel DE$ or $\parallel lines$)	✓S ✓R	2
2.1.3.	$z = 72°$ (alt. ∠'s; $AB \parallel DE$ or $\parallel lines$) OR (corresp. ∠'s; $AB \parallel DE$ or $\parallel lines$) OR (ext. ∠ of Δ)	✓S ✓R	2

2.2.				
2.2.1.	$w = 85°$	(opp. ∠'s of parm. =)	✓S ✓R	2
2.2.2.	$x = 95°$	(co-int. ∠'s; $BG \parallel CD$)	✓S ✓R	2
2.2.3.	$y = 45°$	(ext. ∠ of Δ)	✓S ✓R	2
2.3.4.	$z = 95°$	(∠'s on str. line)	✓S ✓R	2
		OR (alt. ∠'s; $AB \parallel DG$)		
TOTAL = 14 MARKS				
3.				
	In ΔABC:			
	$2x + 2y + 80° = 180°$	(sum of ∠s in Δ)	✓$2x + 2y + 80° = 180°$	
	$\therefore 2x + 2y = 100°$			
	$\therefore x + y = 50°$		✓$x + y = 50°$	
	In ΔPBC:			
	$x + y + C\widehat{P}B = 180°$	(sum of ∠s in Δ)		
	$\therefore C\widehat{P}B = 130°$		✓ans.	
TOTAL = 3 MARKS				

4.1.1.	The shapes are BOTH congruent and similar. The shapes are identical/the sides lengths are equal	✓both ✓reason (any reasonable justification)	2
4.1.2.	The shapes are SIMILAR The shapes are in proportion to each other with regards to their side lengths/the larger shape is 3x bigger than the smaller shape	✓similar ✓reason (any reasonable justification)	2
4.2.	Missing length = 12cm Perimeter = $2(30) + 4(12) + 18$ $= 126cm$	✓12cm ✓ans.	2
TOTAL = 6 MARKS			
5.1.1.	$S(-1; 2)$	✓x ✓y	2
5.1.2.		✓P'$(1; -3)$ ✓Q' $(0; 1)$ ✓R' $(-3; 0)$ ✓S' $(-1; -2)$ -1 if coordinates aren't labelled	4

5.2.		**5.2.1.** ✓D' $(-1; 2)$ ✓E' $(2; 1)$ ✓F' $(-2; -2)$ ✓G' $(-\frac{1}{2}; 1)$ **5.2.2.** Correct image drawn	4 1
TOTAL = 11 MARKS			
6.1.			
	Area of semi-circle $= \frac{1}{2}\pi(6)^2$ $= 18\pi\ m^2$ Height of triangle: $(12)^2 = h^2 + (6)^2$ (pythag) $\therefore h^2 = (12)^2 - (6)^2$ $\therefore h = 10{,}39m$ Area of triangle $= \frac{1}{2}(12)(10{,}39)$ $= 62{,}35m^2$ Total area $= 118{,}90m^2$	✓radius = 6m ✓area of semi-circle ✓pythag + reason ✓height of triangle ✓area of triangle ✓ans.	6

6.2.		*conversion error – can get max 3 out of 4	
	$3{,}5l = 3500ml = 3500cm^3$ $\therefore 3500 = 25 \times 20 \times h$ $\therefore h = 7cm$	✓conversion ✓sub LHS ✓sub RHS ✓h	4
TOTAL = 8 MARKS			
7	 $120 \times \frac{1}{4} = 30$ $120 \times \frac{1}{5} = 24$ $120 \times \frac{1}{6} = 20$ $x + z = 30\,; x + y = 24\,; y + z = 20$ $\therefore 2x + 2y + 2z = 74$ $\therefore x + y + z = 37cm^2$	✓ areas ✓ equation = 74 ✓ ÷ 2 ✓ans.	
TOTAL = 8 MARKS			
GRAND TOTAL = 60 MARKS			