1	(a)		cuboid	1	B1	Accept rectangular cuboid or rectangular prism. Do not accept cube

2	a	$(x =)$ 270 ÷ (12 × 5) (= 4.5) oe		3	M1	
		$\pi \times$ '4.5'^{2} × 2 × '4.5' (= 182.25π oe)			M1	ft dep on M1
			573		A1	accept 572 – 573
	b		1 000 000	1	B1	or (1 ×) 10^6 or (one or 1) million oe
						Total 4 marks

3	(a) (i)		Sphere	1	B1	
	(a) (ii)		Cone	1	B1	
	(a) (iii)		Prism	1	B1	Accept hexagon prism or hexagonal prism
	(b) (i)		8	1	B1	
	(ii)		12	1	B1	
	(c)	54 ÷ (9 × 2)		2	M1	
			3		A1	
						Total 7 marks

4	e.g. 30 × 20 × 125 (= 75 000) **or** 85 × 40 × 125 (= 425 000) **or** (60×30+(85−30)×40)×125(= 500 000) oe		4	M1	for a method to find the volume of water already pumped out **or** the volume of water left **or** the total volume of the container
	"75 000" ÷ 1.5 (= 50 000) **or** "75 000" ÷ 90 (= 833.3... or $\frac{2500}{3}$) **or** "425000"÷"75000"(= 5.66... or $\frac{17}{3}$) **or** "500000"÷"75000"(= 6.66... or $\frac{20}{3}$)			M1	M2 for $\frac{\text{"425000"}}{\text{"75000"}} \times 1.5$ oe (= 8.5) **or** $\frac{\text{"500000"}}{\text{"75000"}} \times 1.5$ oe (= 10)
	"425 000" ÷ "50 000" (= 8.5) **or** "425 000" ÷ ("833.3..." × 60) oe (= 8.5) **or** "5.66…" × 1.5 (= 8.5) **or** "6.66…" × 1.5 (= 10)			M1	
		20 30		A1	Allow 8 30 (pm)
					Total 4 marks

5	(a)	0.5 × (13.5 + 17) × 10.4	158.6	2	M1 for a complete method eg rectangle ±2 triangles
					A1 allow 159
	(b)	15.5 × 8 (=124) or 15.5 × 8 × x 15.5 × 8 × x = 806	6.5	3	M1
		806 ÷ "124"			M1 dep
					A1
					Total 5 marks

6			3	M1 For area of 2 different faces (ie not 2 triangles)
	0.5 × 4.8 × 3.6 (= 8.64) oe or 4.8 × 3.6 if clear intention for this to be 2 triangles 7 × 3.6 (= 25.2) 7 × 4.8 (= 33.6) 7 × 6 (= 42) **(all measurements with intention to add)**			M1 For adding together 5 areas , at least 4 of which are correct NB: (3.6 + 4.8 + 6) × 7 (= 100.8) is 3 faces
	Correct answer scores full marks (unless from obvious incorrect working)	118		A1 118.1 or 118.08
				Total 3 marks