	Area of Shapes Mark Scheme:	
1	Rectangle ABCD $Area = 5 \times 7 = 35cm^2$ Rectangle CEFG $Area = 6 \times 9 = 54cm^2$	[1] For both areas of each rectangle
	Triangle DCG $Area = \frac{1}{2} \times 5 \times 9 = 22.5cm^2$	[1] Correct area
	$Total\ area = 35 + 54 + 22.5 = 111.5cm^2$	[1] Final answer
2	$45 \times 15 = 675cm^2$ $\frac{1}{2} \times 70 \times 35 = 1225cm^2$ $85 \times 10 = 850cm^2$ $Total\ area = 1225 + 675 + 850 = 2750cm^2$	[1] Correct area of storeroom
	$Total\ area\ required = 14 \times 200 = 2800cm^2$	[1] Correct area of 14 items
	There is not enough space in the storeroom.	[1] Must have working from previous 2 marks.
3	Shape A = $\pi r^2 = 9\pi = 28.27cm^2$ Shape B = $base \times height = 27cm^2$ Shape C = $\frac{top+bottom}{2} \times height = 27cm^2$ Shape D = $23cm^2$	[1] Correctly identifying 3 out of 4 areas
	B & C are have the same area	[1] Identifying the correct shapes
4	$Total\ area = base \times height = 50 \times 30 = 1500m^2$ $Flower\ bed\ area = \frac{15+5}{2} \times 30 = 300m^2$	[1] Total area and flower bed calculated
	$Pond\ area = \frac{1}{2} \times \pi r^2 = 50\pi$ $Pond\ area = \frac{1}{2} \times \pi r^2 = 50\pi$	[1] Area of ponds
	$Grass\ area = 1500 - 300 - 50\pi - 50\pi$ $= 885.84m^2(2dp)$	[1] Final calculation and answer to 2dp.

5	$area\ of\ triangles\ together = 2 \times x = 2x$	[1] Correct answer for area
	$area = x \times x = x^2$ $x^2 = 2x$ $x^2 - 2x = 0$ $x(x-2) = 0$ $x = 0\ or\ x = 2$	[1] Area of Parallelogram
	$x = 2$	[1]Value of x
6	$18 \div 3 = 6$	[1] Length of one side calculated
	$x = \sqrt{6^2 - 3^2} = 3\sqrt{3}$ $Area = \frac{1}{2} \times 3\sqrt{3} \times 6 = 9\sqrt{3}\ cm^2$	[1] use Pythagoras to find the height of the triangle.
	$area = 6 \times 9\sqrt{3} = 54\sqrt{3}\ cm^2$ $Answer\ =\ 93.53\ (2\ d.p.)$	[1] Total area calculated
7	$x = \sqrt{4^2 - 2^2} = 2\sqrt{3}$	[1] Cutting a triangle in half it has a base of length 2 and hypotenuse of length 4.
	$Area = \frac{1}{2} \times 2\sqrt{3} \times 4 = 4\sqrt{3}$	[1] Area of one triangle
	$area = 2 \times 4\sqrt{3} = 8\sqrt{3}$	[1] Area of both triangles

END