	Fruit Boxes	Rubric	
		Points	Section points
1.	The dimensions of the box are (4”) x 28” x 14” Award 1 point for each of 28” and 14”.	2 x 1	
	The volume is therefore 1568 inches^3 (follow-through)	1	3
	Uses a logical, sensible approach such as; Tries 3”, then 5”, sees that 5” gives a bigger answer, so tries 6”, 7” etc.	2	
	Partial credit: if method unclear, but apparently correct.	(1)	
	Correct calculations of volume between height = 5” and height = 7”		
	height width depth volume 5 26 13 1690 6 24 12 1728 7 22 11 1694	3	
	This suggests that the maximum volume occurs at or near height = 6” and is 1728 inches^3	1	
	Any attempt to justify why it is exactly 6” (e.g. tries 5.9 and 6.1 or draws a graph)	1	
	Alternative method May find maximum value by differentiation	or 7	7
	Total Points		**10**