Answers and mark guide

Q	Answer	Working	Marks
1	**117π cm³**	π × 3² × 13	3
2	**251 cm³**	π × 4² × 5	3
3	**64π cm²**	2πrh	3
4	**36π cm²**	πr²	2
5	**567π cm³**	Radius = 9	3
6	**603 cm²**	2πr² + 2πrh	4
7	**905 ml**	πr²h	4
8	**5 cm**	125π ÷ π5²	4
9	**5 cm**	r² = V ÷ πh	4
10	**440 cm²**	2πrh	4
11	**283 litres**	Volume in cm³ ÷ 1000	5
12	**4 : 1**	Volume ∝ r²	5
13	**16.9 litres**	πr²L ÷ 1000	5
14	**1.75 cm**	Same volume: h ÷ 4	5
15	**250π cm³**	Height = 10	5
16	**77π cm³**	π(6² − 5²) × 7	5
17	**5880π cm³**	Cross-section πr² × 120 cm	5
18	**3 cm**	πr²(2r) = 54π	5
19	**756π cm³**	πr²h − ⅓πr²h	5
20	**4.97 cm**	h = V ÷ πr²	5

My score: _____ / 84 Questions 1–15 = 59 marks (Foundation focus)