Answers and mark guide

Q	Answer	Working	Marks
1	**334 cm²**	2(11×5 + 11×7 + 5×7)	3
2	**294 cm²**	6 × 7²	2
3	**268 cm²**	Add the areas of all 6 faces.	3
4	**132 cm²**	2lw + 2lh + 2wh	3
5	**5 cm**	150 ÷ 6 = 25; √25	3
6	**330 cm²**	Two triangles: 60; three rectangles: (5+12+13) × 9	5
7	**176π cm²**	2πrh = 2π×8×11	3
8	**216π cm²**	2πr² + 2πrh	4
9	**955 cm²**	2πr² + 2πrh	4
10	**452 cm²**	4πr²	3
11	**156 cm²**	Base + four sides	4
12	**201 cm²**	πr² + 2πrh	4
13	**8**	Only the corner cubes have 3 painted faces.	5
14	**12 cm**	2πr² + 2πrh = 266π	5
15	**84.8 cm²**	2πr² + πr²	5
16	**90 cm²**	3 cm by 3 cm by 6 cm: 2(9 + 18 + 18)	4
17	**162 cm²**	h = 7	5
18	**4 : 1**	2π×4×8 : π×4² = 4π r² : π r²	5
19	**600 cm²**	Area scale factor 4	4
20	**90π cm²**	πr² + πrl = 25π + 65π	5

My score: _____ / 79 Questions 1–15 = 56 marks (Foundation focus)