



Q	Answer	Marks
1	a) 12 b) 5 c) 0.7 d) -2	4
2	9 and 27	1
3	a) 64, 81, 125 b) 4^3 c) 3^5	3
4	a) 100000 b) 10^6 c) 0.01 d) 10^7	4
5	1000000	1
6	a) 72 b) 89 c) 8	3
7	a) 5.07×10^5 b) 0.0026	2
8	a) $5 \times \sqrt{2}$ b) 7.07 c) 3.46	3
9	a) 5^{12} b) 1	2
10	a) 2^6 b) 2^{11} c) 3^5	4
11	3×10^{10}	2
12	a) 81 b) 6.04×10^{24} kg	4
EXTENSION QUESTIONS		
13	a) $\sqrt{10}$ and $\sqrt{20}$ b) $\sqrt{48} = \sqrt{16 \times 3} = 4\sqrt{3}$ c) $5\sqrt{3}$ d) 4	4
14	a) 7 b) 4 c) 8 d) $1/9$	4
15	$4\sqrt{3}$	2
EXTENSION QUESTIONS		
16	a) $2\sqrt{5}$ b) $\sqrt{6}/4$ c) $(3 + \sqrt{3})/3$	5

Full worked solutions, written out by hand, are on the solutions sheet for this topic.