

1) Fill out the table below without your calculator:

Example: $2^2 = 4$

Power → Value ↓	1	2	3	4	5	6	7	8	9	10
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										

2) Evaluate the following expressions:

a) $\sqrt[3]{64}$

b) $\sqrt[3]{(-1/125)}$

c) $\sqrt[9]{(-512)}$

d) $-243^{1/5}$

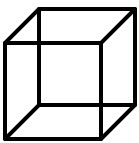
e) $\sqrt[4]{625}$

f) $81^{1/4}$

g) $4096^{1/6}$

h) $\sqrt[4]{1296}$

3)



The volume of the cube to the right is $729p^3$ cm. Find its surface area.

4) If the formula for surface area of a sphere is $S = 4\pi r^2$, solve it for r . Then find the radius when the surface area is 678.584 cm².

5) Evaluate the following:

a) $128^{3/7}$

b) $(125/216)^{2/3}$

c) $27^{-5/3}$

d) $32^{-3/5}$

e) $343^{2/3}$

f) $512^{4/9}$

g) $128^{-5/7}$

h) $64^{-2/3}$