Volume to Surface Area Ratio

Calculate the following for cubes with sides of the given length:

Length of Side	1	2	4	6	8	12	20
Area of Side							
Volume							
Surface Area							
V/SA Ratio (Reduced Fraction							
V/SA Ratio (Decimal)							

1. Find an equation that describes Volume as a function of Length.

2. Find an equation that describes Surface Area as a function of Length.

3. Graph the two equations on the same grid for lengths of 1,2,4,6, and 8

4. Compare the two graphs.

5. At what length is the volume and surface area equal?

6. Explain the effect of the volume/surface area ratio in living things.