

GroupWork 5.1  
7-2-12

Group Members: \_\_\_\_\_

NOTE: Some of these exercises are borrowed from Beginning Algebra by Elayn Martin-Gay.

1. The formula  $V = x^3$  can be used to find the volume of a cube with side length  $x$ . Find the volume of a cube with side length 7 meters.

$$V = 343$$

2. Suppose the cube in question (1) had side length  $3y^4$ . What is the volume?

$$V = 27y^{12}$$

3. Suppose a cylinder has radius  $4x$  and height  $5x^3$ . What is the volume of the cylinder? (Recall  $V_{cylinder} = \pi r^2 h$ )

$$V = 80\pi x^5$$