$\qquad$ Per: $\qquad$

1. Explain the two parts to the volume formulas for cylinders and prisms. Describe the process for finding the volume of any cylinder or prism.
2. Find the volume of the prism.

3. How do you tell which surface to use as the base of your figure in the volume formula?
4. Find the volume of the prism.

5. Find the volume of the cylinder. Give your answer in terms of pi and rounded to the nearest tenth.

6. Find the volume of the cylinder. Give your answer in terms of pi and rounded to the nearest tenth.

7. The dimensions of the prism are multiplied by $1 / 3$. Find the volume of the prism before and after this happens. Describe the effect this has on the volume.

*You should be able to come up with a rule so that if you know the original volume, you can quickly determine the new volume without finding all the new dimensions.
8. Describe the effect on the volume if the dimensions are multiplied by 2.

9. Describe the effect on the volume if the dimensions are multiplied by $1 / 4$.

10. The volume of a cylinder is $576 \mathrm{ft}^{3}$. What is the volume of the new cylinder if all of its dimensions are multiplied by 6 ?
11. Find the volume of the composite figure rounded to the nearest tenth.

12. Find the volume of the composite figure rounded to the nearest tenth.

