

## Section 7.4 Math Link

This worksheet will help you with the Math Link on page 275.

Shrub and flower planters have a variety of shapes.

1. On a separate sheet of paper, design and sketch two different planters. One must be a right triangular prism.

*For #2 to #6, choose one of your planters.*

2. Label your sketch with reasonable dimensions for the planter.

3. What is the volume of this planter? Show your calculations.

4. **a)** Do a second sketch of your planter. This time, show that the walls of the planter are 7 cm thick. This includes the bottom of the planter.

- b)** What are the dimensions of the empty space inside the planter?

- \_\_\_\_\_
- c)** What is the volume of the empty space? Show your calculations.

5. **a)** What operation would you perform on your answers to #3 and #4c) to determine the volume of concrete needed to construct your planter?

- \_\_\_\_\_
- b)** What volume of concrete is needed? Show your calculations.

6. What volume of dirt do you need to fill the planter to 2 cm from the top? Show your calculations.