

Section 7.3 Math Link

This worksheet will help you with the Math Link on page 267.

- 1. a)** On a separate sheet of paper, design and sketch a table with a rectangular top.
 - b)** Label the sketch with the following dimensions:
 - 60 cm for the diameter of the supporting column
 - 10 cm for the thickness of the top
 - any reasonable dimension for the height of the column
 - any reasonable dimension for the length and width of the top
 - c)** What is the volume of the top? Show your calculations.

d) What is the volume of the cylindrical base? Show your calculations.

- 2. a)** On a sheet of paper, design and sketch a table with a circular top.
 - b)** Label the sketch with the following dimensions:
 - 60 cm for the diameter of the supporting column
 - 10 cm for the thickness of the top
 - any reasonable dimension for the height of the supporting column
 - any reasonable dimension for the diameter of the top
 - c)** What is the volume of the top? Show your calculations.

d) What is the volume of the cylindrical base? Show your calculations.

- 3. a)** What answers from above would you need to find the total volume of concrete needed to make both picnic tables?

Show your calculations for parts b) and c).

- b)** Determine the volume of concrete needed for the table with a rectangular top.

- c)** Determine the volume of concrete needed for the table with a circular top.