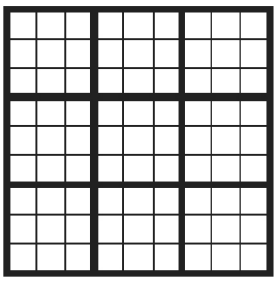
Name: _____ Date: _____

BLM 2–12

Section 2.4 Math Link

This worksheet will help you with the Math Link on page 81.

One example of a 9-by-9 square grid used in sudoku is given below. The smallest squares on the grid have a side length of 1.1 cm.



1. Follow the steps to determine the area of the 9-by-9 grid.

a) Each 3-by-3 section has _____ small squares.

b) The area of each small square = _____ × _____ = _____ cm^2.

c) The area of the 3-by-3 section is _____ × _____ = _____ cm^2.

d) The 9-by-9 grid has _____ 3-by-3 sections.

e) The area of the 9-by-9 grid is _____ × _____ = _____ cm^2.

2. Follow the steps to determine the area of the 9-by-9 grid in another way.

a) The number of small squares in the 9-by-9 grid is _____.

b) Using your answers from #1b) and 2a), determine the area of the entire grid. _____ × _____ = _____ cm^2

c) Compare this answer to the answer for #1e).

3. A 9-by-9 sudoku grid has an area of 182.25 cm^2. Follow the steps to determine the dimensions of each 3-by-3 section.

a) The number of 3-by-3 sections in the 9-by-9 grid is _____.

b) The area of each 3-by-3 section is _____ ÷ _____ = _____ cm^2.

c) The side length of each 3-by-3 section is $\sqrt{}$_____ = _____ cm.

d) The dimensions of each 3-by-3 section are _____ cm × _____ cm.

4. Follow the steps to determine the dimensions of each 3-by-3 section in another way.

a) The side length of the 9-by-9 grid is $\sqrt{}$_____ = _____ cm.

b) The number of 3-by-3 sections along one side of the 9-by-9 grid is _____.

c) The side length of each 3-by-3 section is _____ ÷ _____ = _____ cm.

d) The dimensions of each 3-by-3 section are _____ cm × _____ cm.