Figure 2.4: Sample Geometry Problem—Rectangular Fencing Task

Ms. Brown's class will raise rabbits for their spring science fair. They have 24 feet of fencing with which to build a rectangular rabbit pen in which to keep the rabbits.

1. If Ms. Brown's students want their rabbits to have as much room as possible, how long would each of the sides of the pen be?

2. How long would each of the sides of the pen be if they had only 16 feet of fencing?

3. How would you go about determining the pen with the most room for any amount of fencing? Organize your work so that someone else who reads it will understand it.

Source: Adapted from Stein, Smith, Henningsen, & Silver, 2000.