1. You are building a rabbit cage and have enough money to buy 24 feet of fencing. What size options do you have for the rabbit cage? Which cage would you build? Why? Explain your thinking with the help of diagrams or sketches.
2. King Arthur had 32 knights. He ordered his servants to slide small square tables together to make one big long table for the banquet. If only one person can sit along a side, what is the fewest number of tables that could be used to seat everyone? Explain your thinking.

## The Ladybugs' Garden

1 The Ladybugs are planning to plant a garden this spring. They want it to be rectangular. They have exactly 24 centimeters of fencing put around the perimeter of their garden. Sketch a plan for them on your grid paper.


2 Now sketch as many different rectangles as you can find that have a perimeter of 24 centimeters. Label each one with its perimeter and area, along with equations to show how you got the answers. Note: The sides of your rectangle must lie on the grid lines.

3 All of your rectangles have a perimeter of 24 centimeters. Do they all have the same area? Why or why not?

4 Which rectangle would work best for the Ladybugs' garden? Explain your answer.

## Centimeter Grid Paper

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