

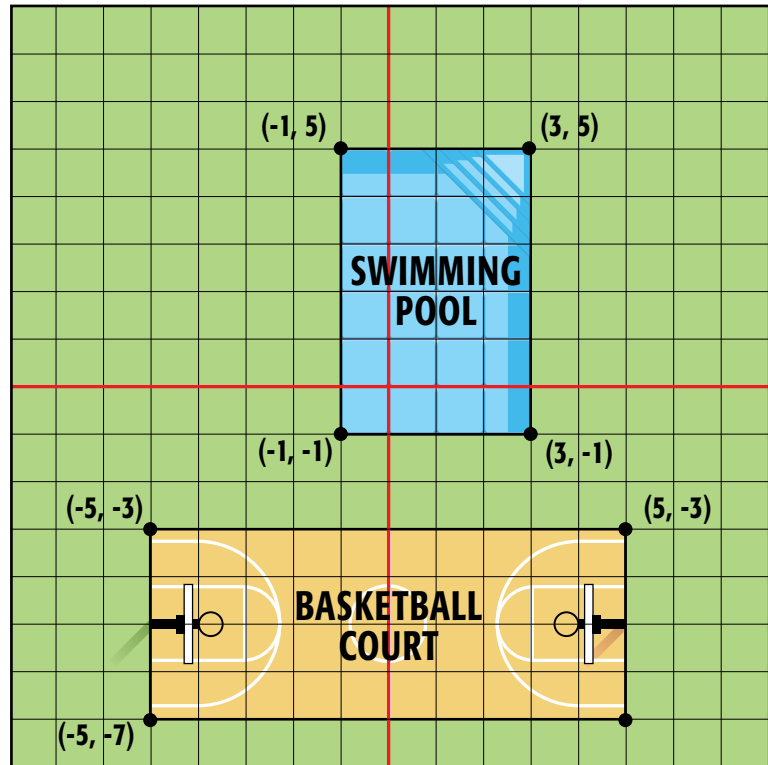
Name: \_\_\_\_\_

Date: \_\_\_\_\_

# Get Moving

You have just taken a job as a design associate with Geometric Yard Spaces, a company that uses scale drawings to plan and construct backyards. Your first assignment is to complete a project for the home of successful athlete Otis McDunk, power forward for the local professional basketball franchise. Mr. McDunk is known to be a demanding client, so your work must be of the highest quality and completely accurate!

Mr. McDunk plans to turn his backyard into an oasis for athletic activities, and he is eager to begin construction. He is relying on you to determine the quantities of materials to order. Get started by using the design draft to the right as you answer the questions below.



1 Unit = 1 Meter

## Work the Math

Record your responses on separate paper as needed.

- 1 For safety purposes, Mr. McDunk would like the outer edge of the swimming pool to be painted with a thin strip of gold reflective paint. How many meters long will the gold strip be?
- 2 Mr. McDunk's children request that the bottom of the swimming pool be lined with glow-in-the-dark tiles. How many square meters of tile will this require?
- 3 The design draft is not complete for the basketball court. What are the coordinates of the fourth corner?
- 4 Mr. McDunk asks that the basketball court be enclosed with a fence to help keep the ball inside. How many meters of fence (including the gate) will be needed?
- 5 Mr. McDunk stipulates that the basketball court's surface be made of maple wood. How many square meters of maple wood will this require?
- 6 Mr. McDunk would also like to add a small rectangular table-tennis area. Find an open place in the backyard, label the four coordinates, and find the perimeter and area of the table-tennis area.