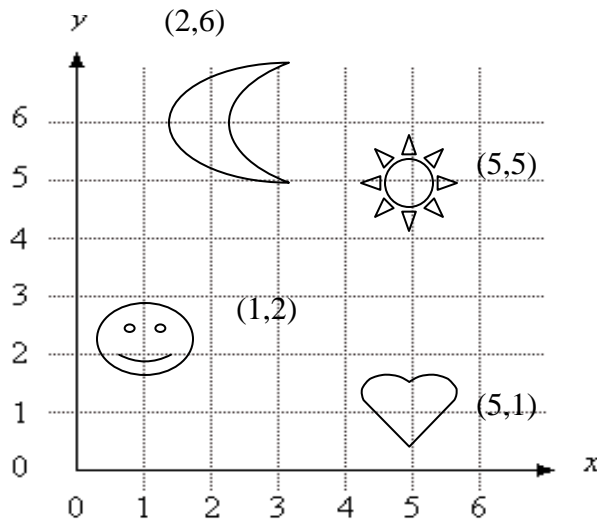


**Lesson: Coordinate Grids**

**Third Grade Objective 3.02:** Use a rectangular coordinate system to solve problems.

**Lesson**



*There are four buildings in Happy City – The Smile House, The Moon House, The Sun House and the Heart House. Ashley wants to travel from the Moon House to the Heart House. Describe the path she could travel on.*

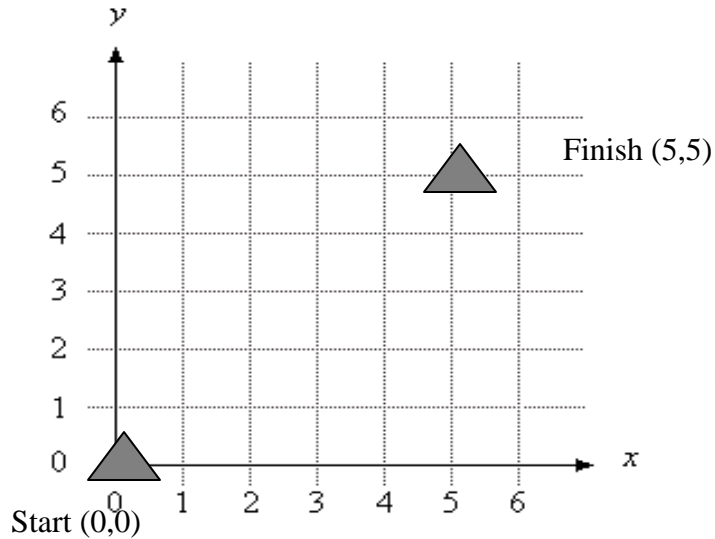
The Moon House is at (2,6) and the Heart House is at (5,1). One path that Ashley could take is to travel South five spaces and then East three spaces. Another path that Ashley could take is to travel East three spaces first and then South five spaces.

*The Sunshine Construction Company wants to build a library near the Sun House. It would be located two spaces South and one space East. What would be the coordinates of the new library?*

Start at (5,5) and travel two spaces South and then one space East. You would then be at (6,3).

*Happy City Painters will be painting all of the buildings North of (3,3). Which two buildings will be painted? Find the point (3,3). Look above that point and you will see that the Moon House and the Sun House will be painted.*

Try these on your own!



Mark and Jill are playing a board game. They both start at (0,0) and are both trying to get to (5,5) first. At each turn, a player rolls a number generator twice. The first roll tells the player how many spaces to move on the x-axis and the second roll tells the player how many spaces to move up the y-axis.

1. On his first turn, Mark rolls a 3 and 2. What are his new coordinates?
2. On her first turn, Jill rolls a 1 and a 4. What are her new coordinates?
3. On his second turn, Mark ends up at (4,4). What numbers did he roll?
4. Jill wins on her next turn. What numbers did she roll?

Here is an online coordinate grid game: <http://www.oswego.org/ocsd-web/games/BillyBug/bugcoord.html>

### Check Your Answers

1. On his first turn, Mark rolls a 3 and 2. What are his new coordinates? (3,2)
2. On her first turn, Jill rolls a 1 and a 4. What are her new coordinates? (1,4)
3. On his second turn, Mark ends up at (4,4). What numbers did he roll? 1 and 2
4. Jill wins on her next turn. What numbers did she roll? 4 and 1