CHAPTER 5
EXTRA RESOURCES

Additional Resources

1. "History of the Turtle" (*http://tiny.cc/turtlehistory/*): Learn where the turtle came from.
2. "Turtle Games" (*http://tiny.cc/turtlegames/*): Explore a gallery of great games and programs that feature the Small Basic turtle.
3. "Absolute Motion vs. Relative Motion" (*http://tiny.cc/2motions/*): Read a comparison between the two perspectives.
4. "Comparing Angle and Turn" (*http://tiny.cc/angleturn/*): Compare the turtle's `Angle` property with the `Turn()` method.
5. "History of the For Loop" (*http://tiny.cc/forloop/*): Learn where the `For` loop came from.
6. "Why Turtles Love Fancy Patterns" (*http://tiny.cc/fancypatterns/*): It all started with Tommy Turtle.
7. "Share Your Turtle Patterns" (*http://tiny.cc/turtlepatterns/*): Explore a gallery of polygonal patterns, including yours.

Review Questions

1. How do you first display the turtle?
2. How do you change your turtle's orientation?
3. How do you move a turtle without changing its current direction (or heading)?
4. How is using the `Angle` property different from using the `Turn()` method?
5. When might you want to lift the turtle's pen, and how would you do it?
6. How do you change the speed of the turtle?
7. When would you want to use a `For` loop?
8. How do you make a `For` loop repeat eight times?
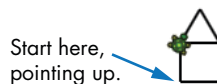9. How do you close the body of a `For` loop?

Practice Exercises

1. Write a program that draws the following pattern. (Hint: draw one flag and then rotate it ten times.)
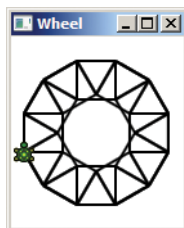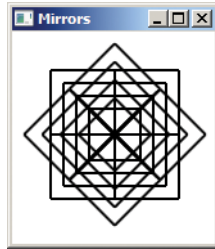
AUS: CAN WE MAKE THIS THE ACTIVE WINDOW?
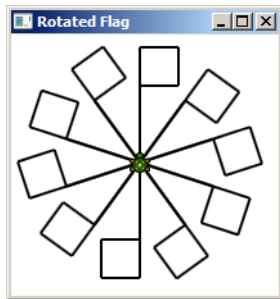
2. Write a program in which your turtle draws the house in the following figure.

Start here, pointing up.

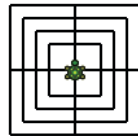Next, write a program to create the wheel pattern shown here by rotating this house 12 times.

3. Write a program to make the turtle draw this pattern.
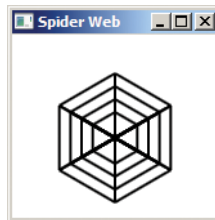

First, draw the pattern shown here.

Second, rotate the pattern four times to create the following pattern.

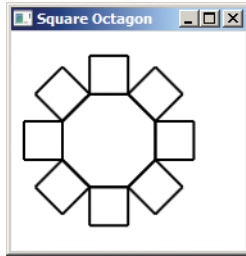Third, repeat the previous pattern after turning the turtle 45 degrees!

4. Write a program to make the turtle draw the spider web shown next.

First, draw the basic pattern shown here, and then repeat the pattern six times using a 60-degree turn angle.

5. Write a program to make your turtle draw this pattern:

6. Write a program to make your turtle draw this pattern: