

## **Quiz: Right Face!**

Introduction to Mobile Robotics > Right Face!

**1.** Predict what the robot will do when this program is downloaded and run. Assume the comment is accurate.



**This robot will make a right-hand swing turn,** which means that it will swing clockwise until motor C has rotated for 720 degrees. Using the basic Taskbot, the entire robot will rotate approximately 270 degrees.

2. Katie changed her robot to make a swing turn to the left instead of the right, but now her robot keeps going in circles! Look at Katie's program (below), and write down what is wrong.



**Katie forgot to reconfigure the Wait For block.** It is still waiting for rotations on Motor C, which is set to brake rather than run. The robot will continue to go until Motor C has spun 720 degrees. It will never stop because Motor C is not moving, and thus will not ever reach 720 degrees. Katie should have configured the Wait For block to wait for degrees on Motor B, because that is the motor that is spinning in this program.

**3.** What is the difference between a swing turn and a point turn? Describe differences both in the program and in the robot behavior.

A swing turn uses one wheel to pivot around a point located under the other wheel, whereas a point turn uses both wheels and pivots around a point in between the two wheels. In the program, you can tell the difference because a point turn will have one motor spinning backward at the same speed that the other motor is spinning forward, but a swing turn will have only one motor spinning at all.