



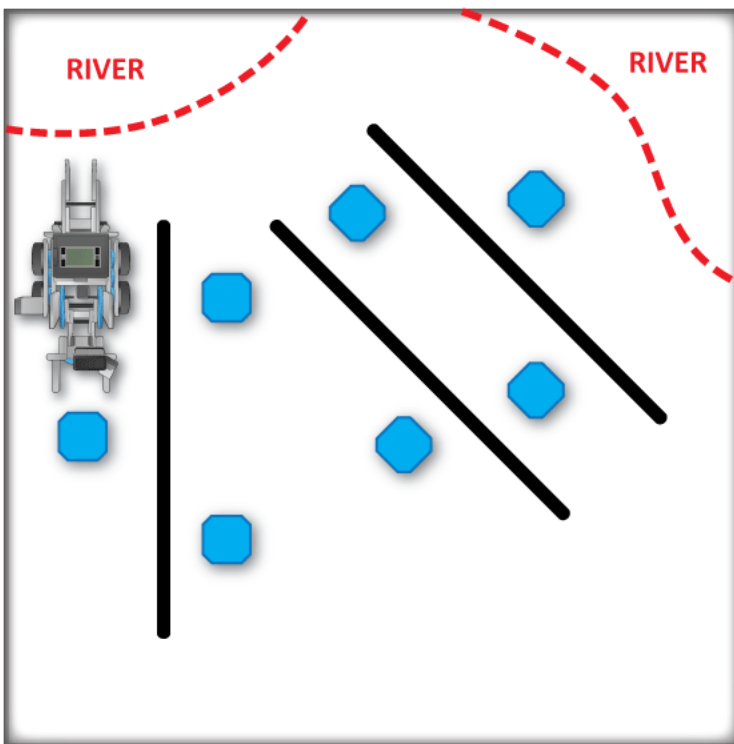
Introduction to Programming



CHAPTER 9: Obstacle Orchard Challenge

In this challenge, you will program your VEX IQ robot to move from its starting area through three rows of fruit trees. In addition, however, there will be one or more obstacles placed at random throughout the orchard. The robot should not touch these obstacles; instead, when it encounters one, it should stop moving until it is removed by hand... at which point the robot should continue on its way.

Rules and Procedures:



- Use a VEX IQ cube for obstacles in the orchard.
- Place up to three cubes at random along straight sides of the rows of trees.
- Be aware to not place an obstacle where the robot may bump into when turning a corner.
- When the robot encounters an obstacle, it should stop and wait for the Obstacle to be removed by hand. It should then continue moving without additional human intervention.

Hints:

- The obstacle can be completely removed from the challenge after the robot approaches it and stops.
- Use lower speeds to minimize effects of momentum when turning.