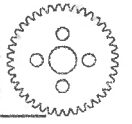


# Challenge 1 – Which Way to Turn



## Objective

In this challenge, you will use what you have learned about gearing to build a robot that will move quickly and remain stable while completing turns.

## Procedure

1. Form a team of two students. Your instructor may assign you a partner or allow you to choose a partner.
2. Design a robot on grid paper that incorporates a gear drive to make the vehicle move faster and have geared steering control.
3. After your design is approved by your instructor, construct the robot using TETRIX PRIME parts.
4. Test and rebuild your design until you have a stable robot that will successfully complete a slalom course.
5. Locate the slalom course created by your instructor or create your own by marking a starting line and place four cones in a straight line spaced 20 inches apart.
6. At a start signal, drive your robot to the far end of the cones and then drive it in a slalom pattern toward the start line, circle the last cone and slalom back through the cones, and race back to the starting line. Use a stopwatch to time each run. The team with the shortest time wins!

