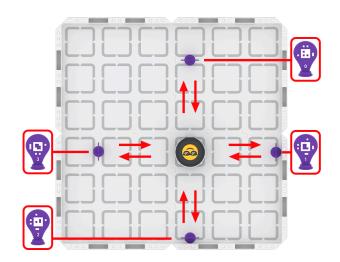# Direction Drills

Use the One Stick Controller to drive the VEX AIM Coding Robot to complete the four-direction reaction drill.

Step by Step

1. Set up the Field as shown in the image above.
   - Outline four destinations on the tiles. The four together will make a plus sign shape (+).
   - Place an AprilTag beside each of the four destinations.
   - Position the robot in the center of the four destinations facing AprilTag ID 0.

2. **Designate one person as the caller** to announce one destination at a time. Each instruction corresponds to one designation indicated by an AprilTag ID. For example: "Destination 1!" would align to AprilTag ID 1. The caller will give four instructions in a random order.

3. **Designate one person as the driver.** Use the Drive mode to drive the robot to the destination based on each instruction from the caller, then drive back to the starting location.
   - Drive the robot to the called destination **without touching** the AprilTag.

'LEVEL UP'

- **Memory challenge -** Have the caller announce all four instructions in a random order at the beginning. The robot must complete all moves in the correct order. The fastest time wins!

Pro Tips

- Push the joystick forward along Axis 1 to drive the robot forward.
- Pull the joystick backward along Axis 1 to drive the robot in reverse.
- Press the Right button to slide the robot sideways right.
- Press the Left button to slide the robot sideways left.

Standard: CSTA 1B-CS-02: Model how computer hardware and software work together as a system to accomplish tasks.