Autonomous Pseudo-code

*OK Robot*

* Move forward (distance)
* Move hook upward (distance/time) to get tote
* Use CAN to check voltage readings if hook succeeded
  + If not go back down
  + Move forward
  + Hook up again
* Move forward (distance) to auto zone
* Drop off tote
* Move backward (distance)

moveForward(distanceToTote);

hookLift();

if(!success) {

hookDrop();

moveForward(someSmallDistance);

hookLift();

}

if(success) {

moveForward(distanceToAuto);

hookDrop();

moveBackward(someSmallDistance);

}

*FANTASTIC Robot*

* Move forward (distance)
* Move hook upward (distance/time) to get tote
* Use CAN to check voltage readings if hook succeeded
  + If not go back down
  + Move forward
  + Hook up again
* Move backward (distance)
* Move to the left (distance)
* Move forward (distance)
* Lift up first tote with hook (distance/time)
* Move hook upward (distance/time) to get second tote
* Use CAN to check if succeeded
* Move backward (distance)
* Move to the left (distance)
* Move forward (distance)
* Lift up first and second tote with hook (distance/time)
* Move hook upward (distance/time) to get third tote
* Use CAN to check if succeeded
* Move forward (distance) to auto zone
* Drop off totes
* Move backward (distance)
* OK Robot
  + Position robot behind 1 tote/bin
  + Proceed to push tote to the auto-zone
  + Back off from tote
  + Partial Tote score and robot score (10-12 points)
* FANTASTIC ROBOT
  + Position robot on right tote
  + Proceed to grab tote, move to the right, grab tote, move to right, grab tote
  + Drive backwards into auto-zone
  + Drop all 3, back off
  + Score tote stack, partial robot score (24 points)

