

6b. (10 points) List the differences between ideal behavior and physical execution. You may use a measuring tape and a protractor to measure the movements. For each difference, explain why it is different.

When the robot moved forward it would drift to the left, and when the robot moved backwards it would drift to the right. Both of these problems can be explained by the fact that the right wheel was moving slightly faster than the left. This could be due to a number of factors in the hardware. I was able to compensate for this by manually adjusting/tuning the values and I came to the conclusion that if I multiply the right wheel speed by 0.95, the car goes in a mostly straight line.