**Master Driver Worksheet**

**Part 1**

**Use this chart to help you find a pattern between the number of rotations and the distance the NXT moves.**

1. **Calculate the ratio of distance to the number of rotations for each trial. Compare this ratio for each trial. What does this tell you about the distance the robot travels for each wheel rotation? (Hint: You may find using inches easier to find the pattern.)**

|  |  |  |
| --- | --- | --- |
| **Number of Rotations** | **Distance (inches)** | **Ratio=**$\frac{Distance}{\# of Rotations}$ |
| 1 |  |  |
| 2 |  |  |
| 3 |  |  |
| 4 |  |  |
| 5 |  |  |
| 6 |  |  |
| 7 |  |  |

**Part 2**

1. **How close was your robot from the people and the finish line when it came to a stop?**
2. **For each trial, measure this distance and record your results in the chart below.**

|  |  |
| --- | --- |
| **Trial** | **Ending Distance from Finish Line (inches)** |
| 1 |  |
| 2 |  |
| 3 |  |