**Improved Movement Quiz**

NAME ____________________________ DATE ____________

1. What factor or factors affect the robot’s ability to move in a straight line?
   a. Motor manufacturing tolerances
   b. Robot weight distribution
   c. Frictional forces in the robot’s drive train
   d. All the above

2. “Closed-loop” control describes a system:
   a. that monitors its own performance and adjusts its output to achieve a desired outcome.
   b. whose specifications are kept secret.
   c. in which a Loop control structure with matching opening and closing punctuation is used.
   d. which is ring-shaped.

3. The command `nSyncedTurnRatio=100;` would tell the slave motor to turn:
   a. at the same rate and in the same direction as the master.
   b. at the same rate and in the opposite direction of the master.
   c. at 100 degrees per second, in the same direction as the master.
   d. at full power forward.

4. The PID algorithm adjusts:
   a. the power level of an individual motor to achieve a target speed.
   b. two motors’ powers to keep them together at all times.
   c. a motor’s gear ratio to achieve a target power.
   d. the amount of friction in a motor to make it run more smoothly.

5. Write the piece of code that would establish a Synchronized relationship between motors B and C, with C as the master and B as the slave in the space below.

```c
1
2
3
4
```