Warm-up Problem

5. Jimmy’s Challenge Dilemma

Name ________________________________

Directions: Please show all work, describe how you got the answer, and circle your final answer. If you use a calculator, say so, but also write out the calculations you did with the calculator.

The Problem: In the Close Shave challenge, Jimmy practiced with his robot on the bare tile floor and his robot barely touched the minifig without knocking it over every time. But when he took his robot to the challenge course, the instructor had put down a thick black piece of tape to mark the starting line. Jimmy put his robot down behind the start line, but was concerned that his program would not work with this setup.

1. Yes or no, should Jimmy be concerned about this new setup?

2. If he should be concerned, explain how far off you would expect his robot to be in this new setup. If he shouldn’t be concerned, explain why not.