



## Homework: Comparing the Wheels of Bicycles and Tricycles

Name: \_\_\_\_\_

- 1) The wheel of a bicycle is usually larger than the wheel of a tricycle. If their wheels go around once, how will the distance traveled by a tricycle compare to the distance traveled by a bicycle? Which one will travel farther? Why do you think so?
  
- 2) A tricycle wheel has a diameter of 3 in. How far would this tricycle travel if all its wheels go around exactly 100 times?  
**Note:** The number of wheels of the tricycle does not affect the distance that it travels. For this question, think of the size and characteristics of one wheel.
  
- 3) A bicycle has a wheel with a diameter 7 times larger than that of a tricycle's wheel. The tricycle has a diameter of 3 in. How far would this bicycle travel if each of its wheels goes around exactly 100 times?
  
- 4) How does your prediction in Question 1 compare to your calculations in Questions 2 and 3? If they are very different, explain which one is correct and why.