Physics 151 Worksheet #6: Centripetal Acceleration

Name: _____   Partner(s): _____

Directions : Complete the following questions based on the computer simulations. Please show all of your work and explain all of your reasoning. Place boxes around your final answers.

Simulation #1: **Sled left on a Merry-Go-Round**
Determine the coefficient of static friction (between the sled and the merry-go-round) on your worksheet.

Answer =	

Simulation #2: Ferris Wheel
What is the NET applied force on a 100 kg rider when the rider is at point (a), (x,y) = (0,-6)? (b), (x,y) = (6,0)? (c), (x,y) = (0,6)?

Answer =	
Answer =	
Answer =	

Simulation #3: Ball on String   Correct Animation = _____

Explanation:

Simulation #4: Car Accelerating on a Circular Track   Correct Animation = _____

Explanation: