

Physics 151 Worksheet #5: Forces II (includes friction)

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: A Mass Being Pushed across a Horizontal Flat Surface with Friction

Determine the values of the unknown applied force, mass of the red block, and the coefficient of kinetic friction.

Answer =	
Answer =	
Answer =	

Simulation #2: Book Being Pushed Against the Wall

Determine the values of the unknown applied force, the mass of the book, and the coefficient of kinetic friction.

Answer =	
Answer =	
Answer =	

Simulation #3: Horizontal Atwood's Machine

Determine the values of the unknown horizontal block, vertical block, and the coefficient of static friction.

Answer =	
Answer =	
Answer =	