

Physics 151 Worksheet #7: Conservation of Energy

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: Gravitational Potential Energy of a Pendulum

Determine the values of the unknown variables.

Answer =	
Answer =	
Answer =	

Simulation #2: Elastic Potential Energy of a Spring

Determine the values of the unknown variables.

Answer =	
Answer =	

Simulation #3: Elastic Potential Energy of a Spring Gun

Determine the values of the unknown variables.

Answer =	
Answer =	

Determine the velocity that the ball will have when it hits the ground (for the simulation of all unknown variables) using energy considerations.

Answer =	
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