Name	Partner	Date

Sonic Ranger 1 Calibration (Gain and Offset):	Sonic Ranger 2 Calibration (Gain and Offset):

Glider colliding with a stationary glider using a spring

Trial	Mass 1 m_1 (kg)	Mass 2 m_2 (kg)	Initial Momentum p_i (kg m/s)	Final Momentum p_f (kg m/s)	Change in Momentum $\Delta p = p_f - p_i$ (kg m/s)
1					
2					

Trial	Initial Kinetic Energy K_i (J)	Final Kinetic Energy K_f (J)	Change in Kinetic Energy $\Delta K = K_f - K_i$ (J)
1			
2			

Glider colliding with (and sticking to) a stationary glider using velcro

Trial	Mass 1 m_1 (kg)	Mass 2 m_2 (kg)	Initial Momentum p_i (kg m/s)	Final Momentum p_f (kg m/s)	Change in Momentum $\Delta p = p_f - p_i$ (kg m/s)
1					

Trial	Initial Kinetic Energy K_i (J)	Final Kinetic Energy K_f (J)	Change in Kinetic Energy $\Delta K = K_f - K_i$ (J)
1			

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What was the ratio of the final to initial kinetic energy (K_f / K_i)?

How did this result compare to the value that is predicted for a completely inelastic collision with a stationary target (as in your prelab question)?

Glider colliding with a stationary glider using rubber bumper

Trial	Mass 1 m_1 (kg)	Mass 2 m_2 (kg)	Initial Momentum p_i (kg m/s)	Final Momentum p_f (kg m/s)	Change in Momentum $\Delta p = p_f - p_i$ (kg m/s)
1					

Trial	Initial Kinetic Energy K_i (J)	Final Kinetic Energy K_f (J)	Change in Kinetic Energy $\Delta K = K_f - K_i$ (J)
1			

Write a paragraph that summarizes your important results