



# How High Does the Ball Bounce?

SHOW ALL WORK! (formula, plug, chug)

1. Calculate the Gravitational PE of the ball at each height.

100cm =

80cm =

60 cm =

40cm =

2. Assume all the Potential Energy was transformed into Kinetic Energy right before the ball hit the floor. Find the velocity of each ball, at all four heights, right before it hits the floor.

100cm =

80cm =

60 cm =

40cm =

3. Identify the independent and the dependent variables on your graph and clearly label them.
4. If your Potential Energy is not equal to your Kinetic Energy, explain at least three places some of the energy went. Remember energy can not be created nor destroyed, it only changes form.

1.

2.

3.