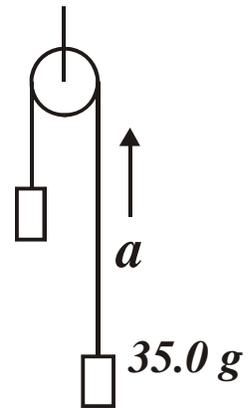


8. A 750.0 g ball is thrown. It travels a distance of 58.0 m and is in the air for a total time of 1.65 s. Ignoring wind resistance and assuming that it is caught at the same height it was thrown from, find: (a) the horizontal velocity of the ball, (b) the initial vertical velocity of the ball, (c) the maximum height the ball reaches, (d) the launch angle of the ball, and (e) the kinetic energy of the ball when it is first thrown.

9. A low friction pulley, light string deal with two masses is set up as shown. If the acceleration of the system is 0.225 m/s^2 , what is the mass of the other weight?



10. A heavy crate rests on the deck. The coefficient of kinetic friction is 0.225. A rigid rod is attached to the crate and is used to push it. If a force of 235 N is applied to the rod, what is the acceleration of the box?

