

Projectile Motion Practice

1. An object spent 8.45 seconds in the air. It was launched at 35° above horizontal.
 - a) Find the initial velocity of the object if it landed at the same level it was launched from.
 - b) Find the initial velocity of the object if it landed 5.4 meters above its launching point.

2. Find the initial velocity of an object that was launched at 60° above the horizontal, given that its horizontal displacement was 78 m to the left of the launching point. Assume the same launching and landing level.

Extra:

3. Find the initial velocity of an object that covered 9.23 m of horizontal distance after it was thrown with speed of 15 m/s. It landed at the same level it was launched from.

This can be solved by graphing.