

Name _____ Period _____

2D Motion Quiz 4

1. A baseball is thrown from center field at 28 m/s at an upward angle of 38° from a height above the ground of 1.8 meters. How far will the ball go before it hits the ground?
2. A buddy down the hall yells "Throw me a pen." Across the hall is a sign that is 1.25 meters tall hanging 0.25 meters below the ceiling that is 3.90 meters from the floor. The sign is 8.00 meters from you as you toss the pen from a height of 1.55 meters. Your amazing brain has mentally calculated the angle of 35° and an upward velocity 11.85 m/s of needed for the pen to make it to your buddy 14.0 meters away.
 - a) Will the pen hit the sign, the ceiling? If not how much will it miss it by?
 - b) How high will it be when (if) it gets to your buddy?