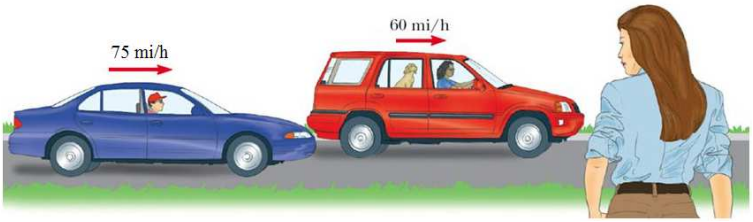
Name _____ Date _____

Honors Physics Kinematics WS #1H

Period _____ Mrs. Nadworny

Introduction to Mechanics

Directions: Read textbook p. 84 – 85 and 39 – 42. Use the information and the notes taken in class to help you answer the following questions.

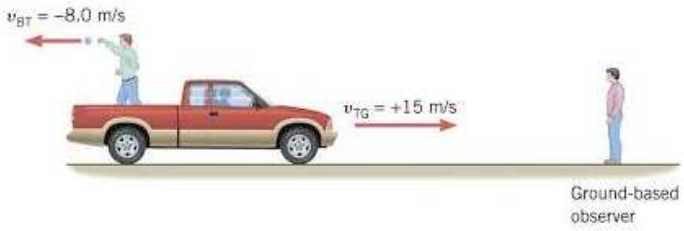


1. Kerri Okey is traveling at 60. mi/h eastward. Raynor Shine is also driving eastward at 75 mi/h. How fast does Kerri appear to be moving according to:
   a. Raynor?

$V_{rel} = V_{kerri} - V_{raynor} = (60.\ mi/hr) - 75\ mi/hr = -15\ mi/hr$

   b. The female observer standing on the sidewalk?

$V_{rel} = V_{kerri} - V_{woman} = (60.\ mi/hr) - 0\ mi/hr = 60.\ mi/hr$ right/forward



2. Phil Down is riding in the back of a pick up truck when he throws a baseball.
   a. How fast does the driver in the pick-up truck view the baseball?

$V_{rel} = V_{ball} - V_{driver} = (-8.0\ m/s) - (15\ m/s) = 23\ m/s$ backward

3. While Hal O. Gin is traveling along an interstate highway, he notices a 170. mile marker as he passes through town. Later Hal stops near the 105 mile marker.
   a. What is the distance between the town and Hal's current location?

65 miles

   b. What is Hal's current position?

+105 miles