Math 241 Worksheet 7 (two-sided)

Name: _____   Section (circle one):   **3**   **4**

1. A plane flying at a speed of 70 m/s and an altitude of 40m has flown over a camera. If the camera is kept pointed at the plane, how fast is the camera rotating when the plane is 50m from the camera? (The 50m is measured from the camera directly to the plane.) Be sure to give your answer with units of measurement.

2. A car is headed <u>towards</u> a typical intersection at 30 ft/s. A person is walking <u>away</u> from the intersection on the other street (at right angles) at 4 ft/s. How fast is the distance between them changing when the car is 5 ft from the intersection and the person is 12 ft from the intersection? In particular, is the distance increasing or decreasing?