

1. Bob is 500 ft. west of an intersection, cycling east at 18 ft/sec.  
Maria is 750 ft. south of the intersection, cycling north at 20 ft/sec.  
When will Maria and Bob be 200 ft. apart?

2. At noon, two blimps are flying at the same altitude. One blimp is flying north at 15 miles per hour. The other is 20 miles east, and flying north at 20 miles per hour.

Find an interval of time one hour long in which the distance between the blimps increases by 3 miles.