

Worksheet on Sections 1.1, 1.2 (1.3, 1.4)
Wednesday, September 29

At 1 pm, an Alaska Airlines jet is over Port Angeles, flying at 400 mph due south. Port Angeles is 62 miles west and 52 miles north of SeaTac. At 1 pm, a Delta Airlines jet is over SeaTac heading straight for Roslyn at a speed of 300 mph. Roslyn is 65 miles east and 17 miles south of SeaTac. The UW is 15 miles due north of SeaTac.

1. Draw a picture of the situation: impose a coordinate system with SeaTac as the origin, draw in a point for each place mentioned, and draw a dotted line indicating the flight path of each plane. Find the coordinates of SeaTac, Roslyn, Port Angeles, and the UW in this coordinate system.
2. At what time will the Alaska jet first come within 70 miles of SeaTac?
3. How long will the Alaska jet be closer than 70 miles to SeaTac?
4. Give the coordinates of the Alaska jet when the Delta jet is over Roslyn.
5. (For this question, it will be helpful to use the material in Sections 1.3 and 1.4.) Give the coordinates of the Delta jet when the Alaska is due west of the UW.