

## Pilot Information for Students

### Chuck

Flight Number	Origination City	Departure Time	Destination City	Arrival Time	Flight Length
483	Seattle	7:00a.m.	San Francisco	9:00a.m.	2 hours
376	San Francisco	10:15a.m.	Phoenix	1:15p.m.	2 hours
812	Phoenix	1:45p.m.	San Francisco	2:45p.m.	2 hours
421	San Francisco	3:45p.m.	Seattle	5:45p.m.	2 hours

Leg 1: What is the likelihood that Chuck will depart Seattle in time to fly to Phoenix? (Be sure to explain your calculations.)

Leg 2: What is the likelihood that Chuck will depart San Francisco in time to fly back to San Francisco?

Leg 3: What is the likelihood that Chuck will depart Phoenix in time to fly to Seattle?

Fill in the table below with the results of your computations.

Chuck

Flight Number	Origination City	Departure Time	Destination City	Arrival Time	Flight Length	Likelihood of On-Time Departure	Accumulated Likelihood
483	Seattle	7:00a.m.	San Francisco	9:00a.m.	2 hours		
376	San Francisco	10:15a.m.	Phoenix	1:15p.m.	2 hours		
812	Phoenix	1:45p.m.	San Francisco	2:45p.m.	2 hours		
421	San Francisco	3:45p.m.	Seattle	5:45p.m.	2 hours		

If a pilot has less than a 75% chance of arriving in time for the next flight, a standby pilot must be ready to fly. Will a delayed arrival or departure for Chuck reach a point at which a standby pilot must be scheduled?