

Origin	Dest	Hub	Pax	Flight 1								Flight 2								Total Pax Trip Delay
				Flight #	Sched Dep	Sched Arr	Act Dep	Act Arr	Seats	Pax Ticketed	Pax Flown	Flight #	Sched Dep	Sched Arr	Act Dep	Act Arr	Seats	Pax Ticketed	Pax Flown	
DCA	DEN	NUL L	100	DAL 23	08:00	09:45	08:30	10:15	120	100	100									1,500 mins
DCA	DEN	NUL L	75	DAL 24	10:00	11:45	CNX		120	75	0									See below
DCA	DEN	ATL	9	DAL 46	11:00	12:24	11:01	12:22	120	80	115 = 80+35	DAL 47	13:00	15:00	13:05	15:14	120	85	120 = 85+35	0
DCA	DEN	DTW	15	Dal 78	11:00	12:15	11:10	12:10	120	80	120 = 80+40	DAL 79	13:00	15:00	13:30	15:30	120	50	85 = 50+35	225 mins

Compute Passenger Trip Delays for each of the following Itineraries: DAL 23, DAL 24, DAL 46/DAL 47, DAL 78/DAL 79

Show Total Pax flown for each flight (including rebooked passengers for each flight)

Show all work below.

DAL 23: $TPTD = 100 \text{ pax} * [\text{Max}(10:15-9:45) - 15 \text{ min buffer}, 0] = 1,500 \text{ mins}$

Pax Flown on Itinerary = 100

NOTE: [Max(10:15-9:45) - 15 min buffer, 0] takes the difference between the actual arrival and the ticketed arrival times, minus a 15 minute buffer. Delays cannot be negative, so minimum is zero.

DAL 24: $TPTD = (35 \text{ pax} * [\text{Max}(15:14 - 11:45) - 15 \text{ min buffer}, 0]) + (40 \text{ pax} * [\text{Max}(15:30 - 11:45) - 15 \text{ min buffer}, 0]) = (35*194) + (40*210)$

Pax Flown on Itinerary = 0

NOTE: Passengers rebooked on DAL46/DAL47. DAL 47 can only take 35 pax (120 seats - 85 pas), so only 35 pax are rebooked on this itinerary. The remaining passengers (40) are rebooked on DAL78/DAL79

DAL 46/DAL 47 - TPTD = 0 (i.e. Ontime)

Pax Flown on Itinerary = 9

NOTE: only 9 passengers on the joint DAL46/47 itinerary

Pax Flown on each Flight = 115 (DAL 46), 120 (DAL 47)

SWYKQ AIRLINE NETWORK PERFORMANCE – PASSENGER TRIP DELAYS

NAME: _____

Dal 178/DAL179 TPTD = 15 pax * $[\text{Max}(15:30-15:00)-15 \text{ min buffer}, 0]$

Pax Flown on Itinerary = 15

NOTE: only 15 passengers on the joint DAL178/179 itinerary

NOTE: Do not double count rebooked passengers

Pax Flown on each Flight = 120 (DAL178), 85 (DAL179)