Math 4553, Homework 3 (Project), Due on 3/28/2014

1. An OSU student plans to drive from Oklahoma City to Denver. According to the following map and given information, please help the student to find

   (a) A route with the shorest distance.

   (b) A route using the shortest time.

   Write down the details of how you solve this problem in a formal report. You can work in small groups, with at most 4 persons per group. If so, please indicate all group members in your report. Each group needs to only turn in one report.

Map Legend			
1 – OKC, OK	2 – Wichita, KS	3 – Salina, KS	4 – I70 cross HWY 283, KS
5 – Dodge City, KS	6 – Woodward, OK	7 – Dalhart, TX	8 – Lamar, KS
9 – I70 cross HWY 287, KS	10– Trinidad, CO	11– Pueblo, CO	12– Denver, CO

Routes connecting two locations, distance and time					
1–2	162 mi, 2 hr 21 mins	2–3	88 mi, 1hr 18 mins	3–4	127 mi, 1 hr 47 mins
4–5	94.7 mi, 1 hr 37 mins	4–9	217 mi, 2 hr 55 mins	5–8	154 mi, 2 hr 36 mins
8–9	117 mi, 1 hr 53 mins	9–12	91 mi, 1 hr 27 mins	12–11	113 mi, 1 hr 43 mins
8–11	122 mi, 2 hr 5 mins	10–11	85.1 mi, 1 hr 11 mins	7–10	151 mi, 2 hr 18 mins
7–8	144 mi, 2 hr 21 mins	5–6	112 mi, 1 hr 59 mins	6–7	196 mi, 3 hr 15 mins
1–6	140 mi, 2 hrs 14 mins	1–7	314 mi, 4 hrs 54 mins	2–5	154 mi, 2 hr 33 mins

2.