

Homework II

This homework is due Thursday, September 17 at the beginning of the class. If you have any questions send me e-mail (serkan@math.sfsu.edu) or call me (338 7723).

1. PG & E has three electric power plants that supply the needs of four cities: San Francisco, Fresno, Sacramento and San Jose. Each power plant can supply the following numbers of kilowatt-hours (kwh) of electricity: plant 1, 35 million; plant 2, 50 million; plant 3, 40 million. The peak power demands in these cities are as follows (in kwh): San Francisco, 40 million; Fresno, 20 million; Sacramento, 30 million; San Jose, 30 million. The cost of sending one million kwh of electricity from the three plants to these four cities is given in the following tableau (in \$ 100,000).

	<i>SF</i>	<i>Fre</i>	<i>Sac</i>	<i>SJ</i>
<i>Plant1</i>	8	6	10	9
<i>Plant2</i>	9	12	13	7
<i>Plant3</i>	14	9	16	5

Formulate this as an LP to minimize the cost of meeting each city's power demand.

- 2) Exercise 2.10.
- 3) Exercise 2.13.
- 4) Exercise 2.6.