**CS 451**

**Activity 14**

**[Linear Programming]** Dorian Auto (Pages 60~62 of the textbook)

* Dorian Auto manufactures luxury cars and trucks.
* The company believes that its most likely customers are high-income women and men.
* To reach these groups, Dorian Auto has embarked on an ambitious TV advertising campaign and will purchase 1-mimute commercial spots on two type of programs: comedy shows and football games.
* Each comedy commercial is seen by 7 million high income women and 2 million high-income men and costs $50,000.
* Each football game is seen by 2 million high-income women and 12 million high-income men and costs $100,000.
* Dorian Auto would like for commercials to be seen by at least 28 million high-income women and 24 million high-income men.
* Use LP to determine how Dorian Auto can meet its advertising requirements at minimum cost.