

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-minute 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.