

**Dr. Z.'s Math 354 REAL Quiz #7**

**NAME:** (print!) \_\_\_\_\_

**E-MAIL ADDRESS:** (print!) \_\_\_\_\_

**1.** (8 pts.) Find the dual of the given linear programming problem.

Minimize  $5x_1 + 2x_2 + 6x_3$

subject to

$$4x_1 + 2x_2 + x_3 \geq 12 \quad , \quad 3x_1 + 2x_2 + 3x_3 \leq 6 \quad ,$$

$$x_1 \geq 0 \quad , \quad x_2 \geq 0 \quad , \quad x_3 \geq 0 \quad .$$