Short solutions Module 10

Exercise 13.1. $x_1 = 3, x_2 = 4$

Exercise 13.2. $x_1 = 0, x_2 = 5, x_3 = 1$

Exercise 13.3. $x_1 = 2, x_2 = 4$

Exercise 14.1.

   (a) For the row of x_1:
$$-\frac{2}{5}s_1 - \frac{4}{5}s_2 \leq -\frac{1}{5}$$

      For the row of x_2:
$$-\frac{1}{5}s_1 - \frac{2}{5}s_2 \leq -\frac{3}{5}$$

      For the objective function row:
$$-\frac{4}{5}s_1 - \frac{3}{5}s_2 \leq -\frac{2}{5}$$

   (c) $x_1 = 3\frac{1}{2}, x_2 = 4$

Exercise 14.2.

   (a) $\frac{1}{2}x_1 + \frac{1}{2}e_2 + \frac{1}{2}s_3 \geq \frac{1}{2}$

   (b) $2x_1 + x_3 \leq 2$

   (c) $x_1 = 0, x_2 = 4, x_3 = 2$

   (d) Ja.