

6. Objective function:

$$z = 4x + 3y$$

Constraints:

$$x \geq 0$$

$$2x + 3y \geq 6$$

$$3x - 2y \leq 9$$

$$x + 5y \leq 20$$

18. Objective function:

$$z = x$$

Constraints:

$$x \geq 0$$

$$y \geq 0$$

$$2x + 3y \leq 60$$

$$2x + y \leq 28$$

$$4x + y \leq 48$$