The following graphs show regions of feasible solutions. Use these regions to find maximum and minimum values of the given objective functions.

1. \( z = 3x + 2y \)
2. \( z = x - 4y \)
3. \( z = 0.35x + 1.25y \)
4. \( z = 1.5x - 0.5y \)
Find the Maximum or Minimum Value for the Objective Function for each set of constraints.

5. Maximize:
   
   \[ z = 8x + 2y \]

   Subject to:
   
   \[ 4x + 5y \leq 35 \]
   \[ x + 5y \leq 20 \]
   \[ y \geq 0 \]
   \[ x \geq 0 \]

6. Minimize:
   
   \[ z = x - 2y \]

   Subject to:
   
   \[ 3x + 4y \geq 12 \]
   \[ x + 2y \leq 10 \]
   \[ 0 \leq x \leq 4 \]
7. Minimize:
   \[ z = 4x + 7y \]
Subject to:
   \[ x - y \geq 1 \]
   \[ 3x + 2y \geq 18 \]
   \[ x \geq 0 \]
   \[ y \geq 0 \]

8. Maximize:
   \[ z = 5x + 2y \]
Subject to:
   \[ 4x - y \leq 16 \]
   \[ 2x + y \geq 11 \]
   \[ x \geq 3 \]
   \[ y \leq 8 \]