

(1) [15] For the following system of linear inequalities:

- (i) [10] Neatly graph the system.
- (ii) [4] Determine all corner points.
- (iii) [1] State whether the resulting graph is bounded or unbounded.

$$x - y \geq -4$$

$$x + 2y \leq 11$$

$$2x + y \leq 16$$

$$x \geq 0$$

$$y \geq 0$$

