Graphing Systems of Inequalities

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Names: _____

Period:

Graph these systems of inequalities to find the regions they define. Then, locate the corner points, which are called vertices. View MATHguide's online lesson for assistance.

1)
$$\begin{cases} x \geq 0 \\ y \geq 0 \\ 2x + 5y \leq 100 \end{cases}$$

2)
$$\begin{cases} x \geq 0 \\ y \geq 0 \\ x \leq 30 \\ y \leq 70 \end{cases}$$

3)
$$\begin{cases} x \geq 10 \\ y \geq 20 \\ x + y \leq 70 \end{cases}$$

4)
$$\begin{cases} x \geq 10 \\ y \geq 30 \\ 3x + 2y \leq 120 \end{cases}$$

5)
$$\begin{cases} x \geq 10 \\ y \geq 5 \\ 45x + 30y \leq 900 \end{cases}$$

6)
$$\begin{cases} x \geq 5 \\ y \geq 10 \\ x + y \geq 20 \\ x + y \leq 50 \end{cases}$$

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