

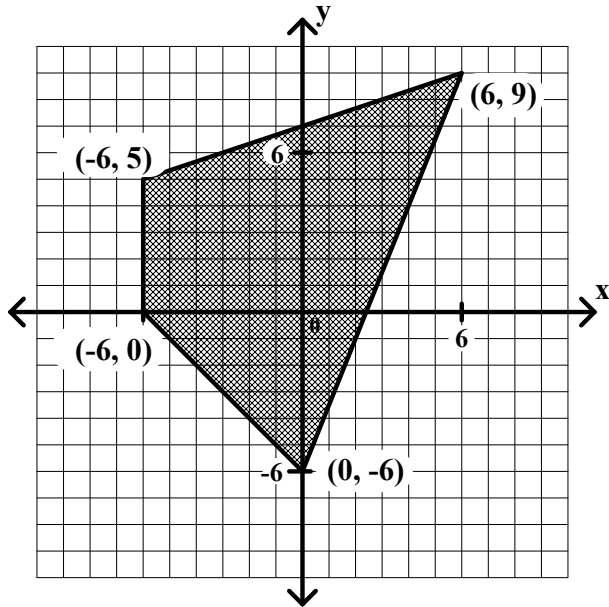
General Algebra II Worksheet #6 Unit 4 Selected Solutions

Graph each of the following systems of linear inequalities. Find the x and y coordinates of any vertex.

1. $x - 3y \geq -21$
 $5x - 2y \leq 12$
 $x + 6 \geq 0$
 $x + y \geq -6$

$1x - 3y \geq -21$ $5x - 2y \leq 12$
 $-3y \geq -1x - 21$ $-2y \leq -5x + 12$
 $y \leq \frac{1}{3}x + 7$ $y \geq \frac{5}{2}x - 6$

$x + 6 \geq 0$ $x + y \geq -6$
 $x \geq -6$ $y \geq -1x - 6$



5. $x + 3y \leq 15$
 $2x + y \leq 10$
 $x - y \leq 8$
 $x + 2y \geq -10$
 $x + y \geq -7$
 $-2x + 3y \leq 24$

$1x + 3y \leq 15$ $2x + y \leq 10$
 $3y \leq -1x + 15$ $y \leq -2x + 10$
 $y \leq -\frac{1}{3}x + 5$

$x - y \leq 8$ $1x + 2y \geq -10$
 $-y \leq -1x + 8$ $2y \geq -1x - 10$
 $y \geq x - 8$ $y \geq -\frac{1}{2}x - 5$

$1x + y \geq -7$ $-2x + 3y \leq 24$
 $y \geq -1x - 7$ $3y \leq 2x + 24$
 $y \leq \frac{2}{3}x + 8$

