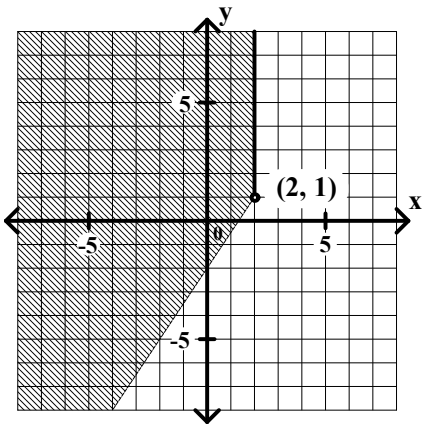
Algebra II Worksheet #2 Unit 4 selected solutions

2. $x \leq 2$ and $3x - 2y < 4$



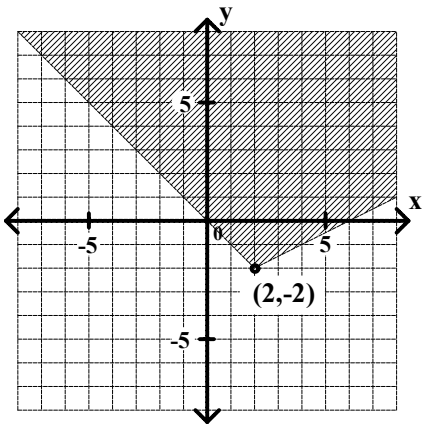
$3x - 2y < 4$

$-2y < -3x + 4$

$y > \frac{3}{2}x - 2$

4. $x - 2y < 6$ and $x + y > 0$

$y > -x$



$x - 2y < 6$

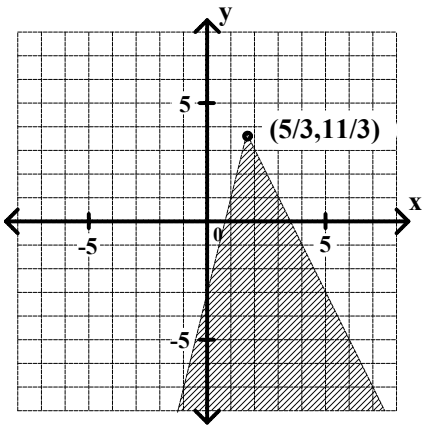
$-2y < -x + 6$

$y > \frac{1}{2}x - 3$

6. $4x - y > 3$ and $2x + y < 7$

$-y > -4x + 3$ $y < -2x + 7$

$y < 4x - 3$



$4x - 3 = -2x + 7$

$6x = 10$

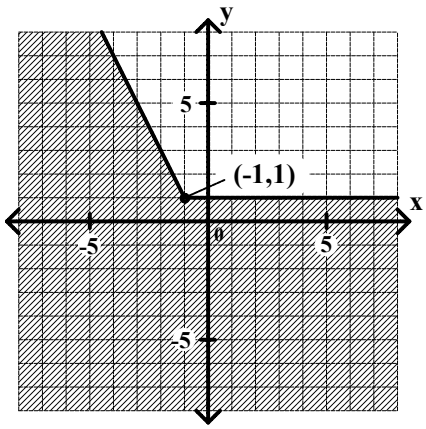
$x = 5/3$

$y = 20/3 - 9/3$

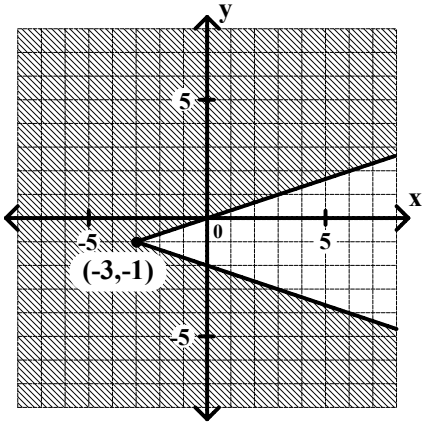
$y = 11/3$

7. $y \leq 1$ or $2x + y \leq -1$

$y \leq -2x - 1$



9. $x - 3y \leq 0$ or $x + 3y \leq -6$



$x - 3y \leq 0$

$-3y \leq -x$

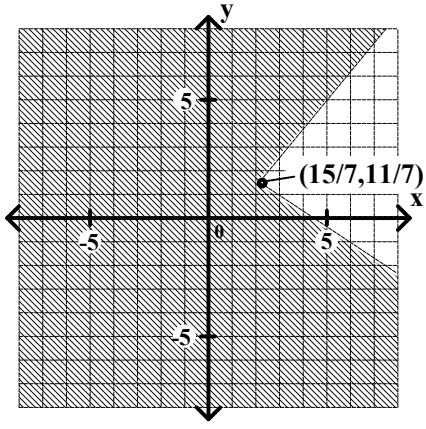
$y \geq \frac{1}{3}x$

$x + 3y \leq -6$

$3y \leq -x - 6$

$y \leq \frac{-1}{3}x - 2$

12. $2x + 3y < 9$ or $6x - 5y < 5$



$2x + 3y < 9$

$3y < -2x + 9$

$y < \frac{-2}{3}x + 3$

$6x - 5y < 5$

$-5y < -6x + 5$

$y > \frac{6}{5}x - 1$