

# Section 9.4 Continued

$x - y < 1$      $(0,0)$      $0 - 0 < 1$

$2x + 3y \geq 12$      $(0,0)$   
 $2 \cdot 0 + 3 \cdot 0 \geq 12$   
 $0 \geq 12$

$x - y = 1$

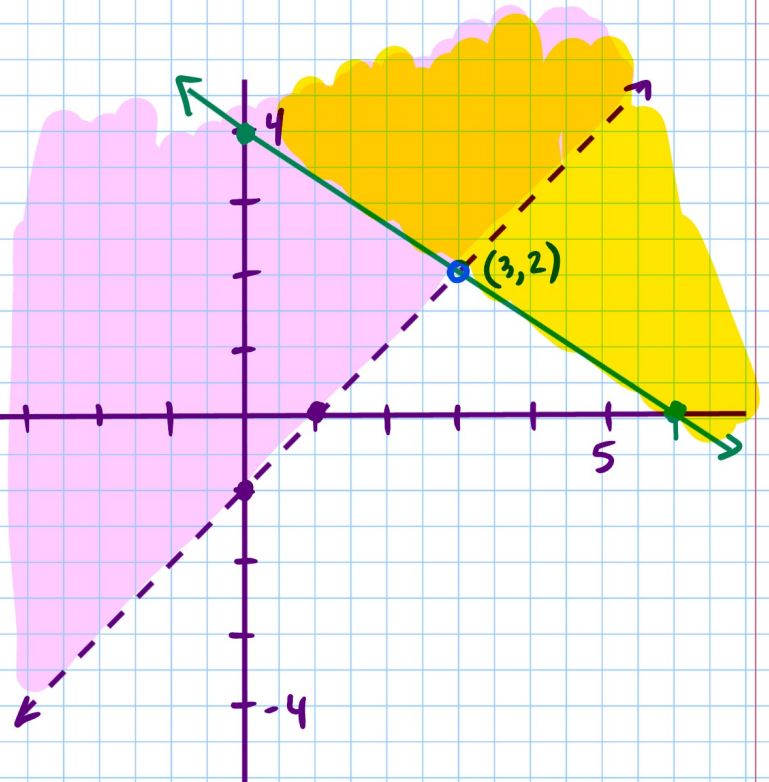
Dashed

$\frac{x\text{-int}}{x=1}$	$\frac{y\text{-int}}{-\frac{y}{-1} = \frac{1}{-1}}$
$(1,0)$	$y = -1$
	$(0, -1)$

$2x + 3y = 12$

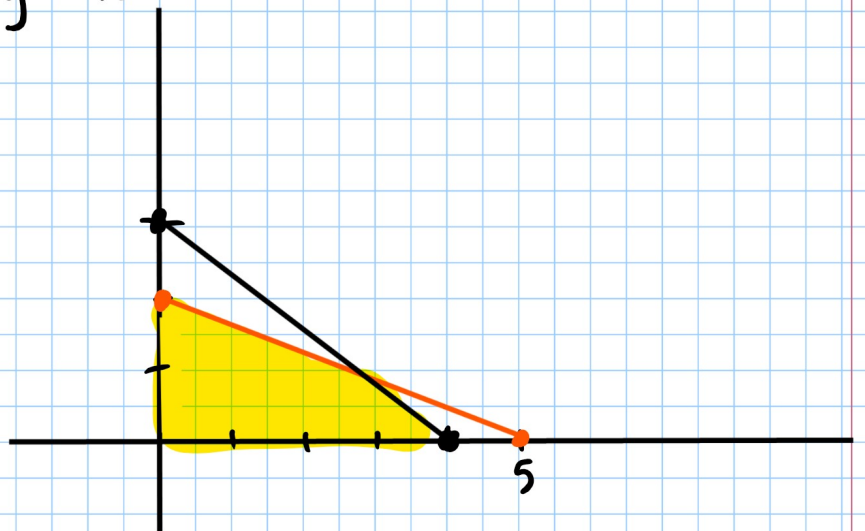
Solid

$\frac{x\text{-int}}{2x=12}$	$\frac{y\text{-int}}{3y=12}$
$x=6$	$y=4$
$(6,0)$	$(0,4)$

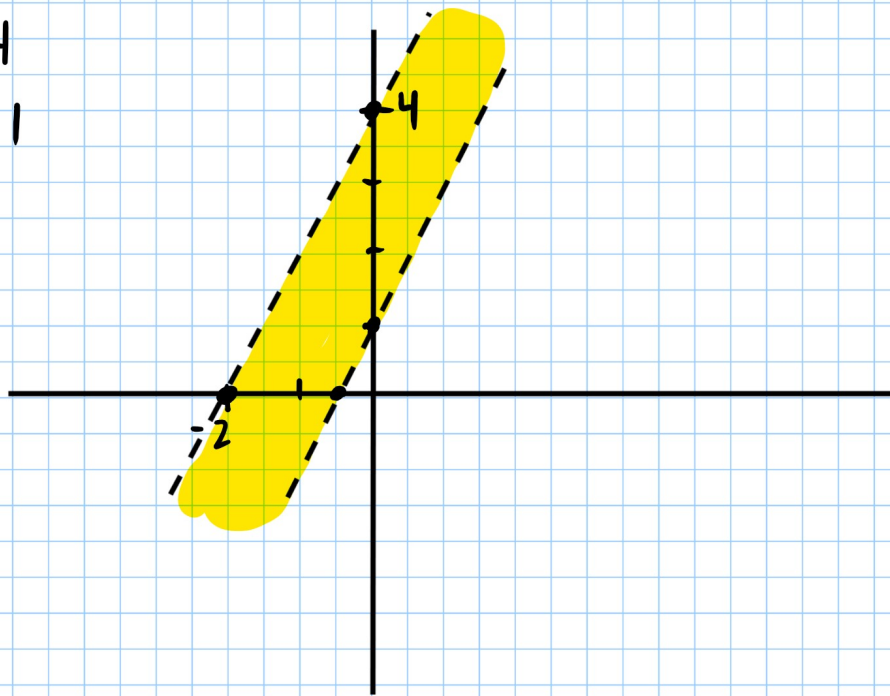


ex:  $x \geq 0$  } 1st quadrant  
 $y \geq 0$

$2x + 5y \leq 10$      $3x + 4y \leq 12$



$$12) \quad \begin{aligned} -2x + y &< 4 \\ -2x + y &> 1 \end{aligned}$$



$$14) \quad \begin{aligned} y &\geq 1 \\ 2 &\leq x \leq 6 \\ x - 2y &\geq -2 \\ x + y &\leq 6 \end{aligned}$$

