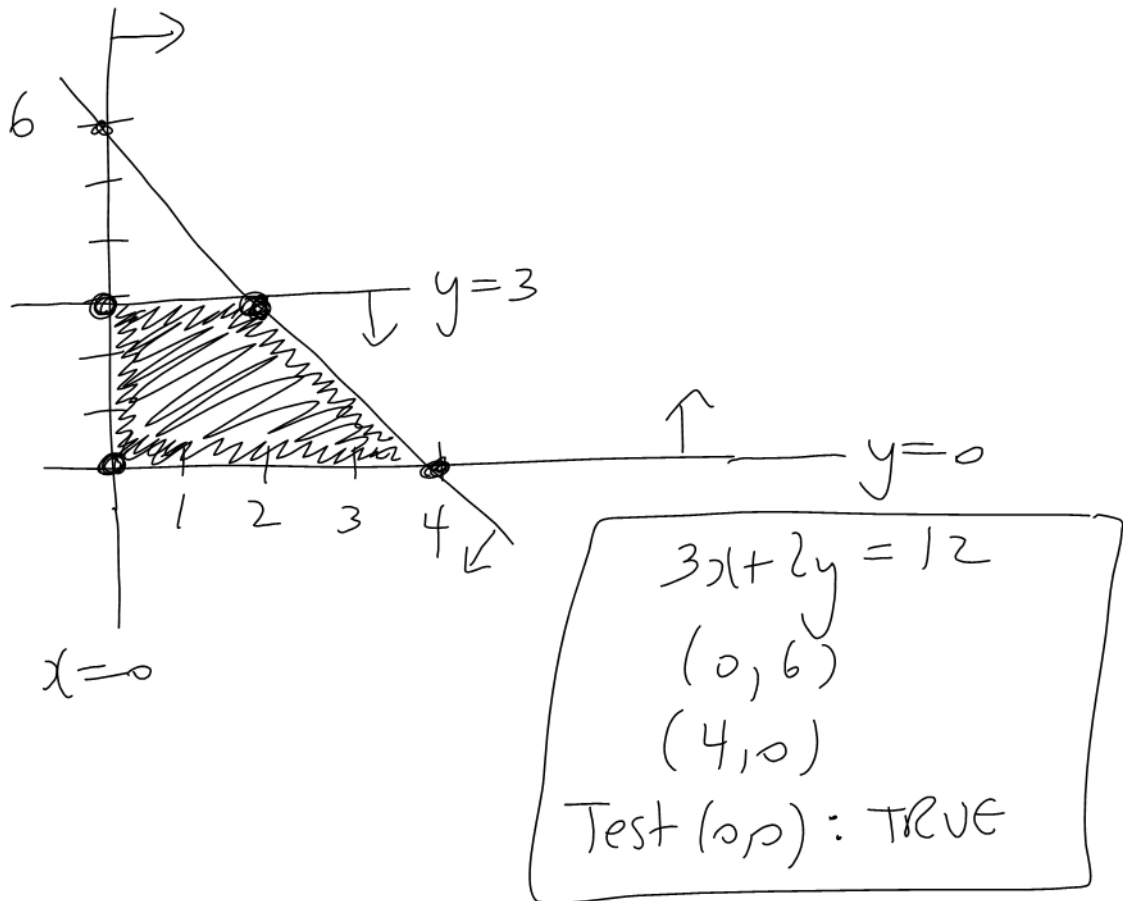Name:_____

Graph the feasible set for the inequalities below. Using your graph, find all the vertices.

$$3x + 2y \leq 12, \quad y \leq 3, \quad x \geq 0 \text{ and } y \geq 0$$

$y = 3$

$y = 0$

$x = 0$

$3x + 2y = 12$
$(0, 6)$
$(4, 0)$
Test $(0,0)$: TRUE

Vertices

$(0, 0)$
$(0, 3)$
$(4, 0)$
$(2, 3)$

Use the graph
OR
$y = 3 \rightarrow 3x + 2y = 12$
$3x + 6 = 12$
$3x = 6$
$x = 2$