

$$\textcircled{11} \quad 3x + 2y \leq 96$$

$$x \leq 20$$

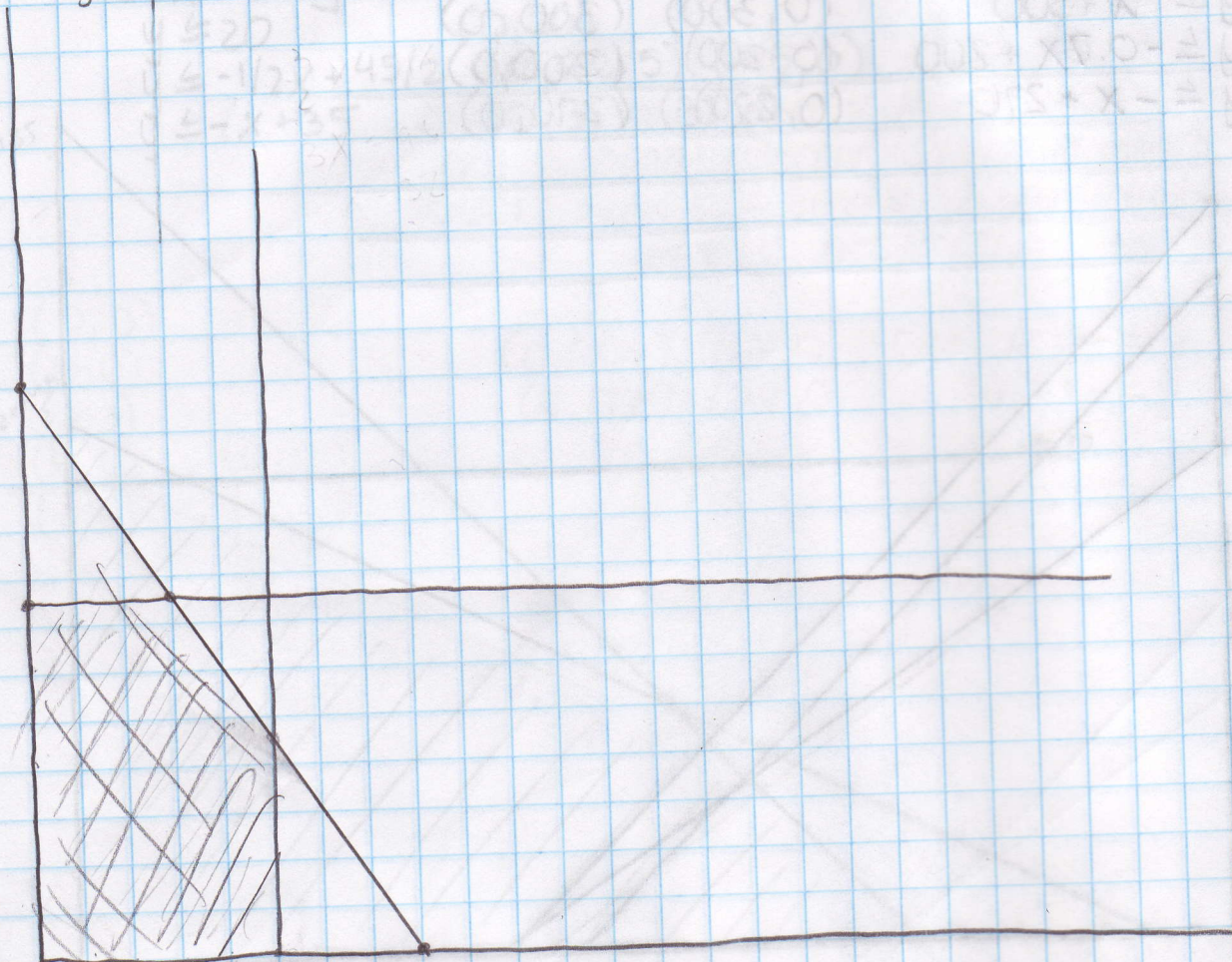
$$y \leq 30$$

$$30x + 40y \leftarrow \text{PROFIT EQUATION}$$

$$y \leq -3/2x + 48 \quad (0, 48) \quad (32, 0)$$

$$x \leq 20$$

$$y \leq 30$$



$(0, 30)$	$30(0) + 40(30)$	1200
$(12, 30)$	$30(12) + 40(30)$	1560
$(20, 18)$	$30(20) + 40(18)$	1320
$(20, 0)$	$30(20) + 40(0)$	600

The combination of 12 racing models and 30 free-style models will create the greatest profit of \$1560.

$(0, 30)$	$30(0) + 20(30)$	600
$(12, 30)$	$30(12) + 20(30)$	960
$(20, 18)$	$30(20) + 20(18)$	960
$(20, 0)$	$30(20) + 20(0)$	600

The combinations of 12 and 30 and 20 and 18 shoes of each type will create the greatest profits of \$960.