

HONORS

P1. A company produces two models of light fixtures, A and B, each of which must be assembled and packed. The time required to assemble model A is 12 minutes, and to assemble model B it takes 18 minutes. It takes 2 minutes to package model A and 1 minute to package model B. Each week there are 240 hours of assembly time and 20 hours of packing time available. If model A sells for \$1.50 and model B sells for \$ 1.70, how many of each model should be produced to obtain the maximum weekly income? What is the maximum weekly income? (BE SURE YOU CONVERT HOURS TO MINUTES!!)

Let =  
=

Objective function:  $I =$   
(income)

Constraints: (assembly)  
(packaging)

