

Daily Agenda

Learning Target: I can use systems of linear inequalities to solve a real world problem.

Homework
#2 in packet

Assessments
Unit 2 Test - 9/30
Calc and No Calc

It's your life - but only if you make it so.
-Eleanor Roosevelt

Nov 15-8:24 PM

2.4 Linear Programming

We are trying to find the best fit or solution to a problem

The system of inequalities is our constraints (we don't have unlimited resources)

Sep 24-7:18 AM

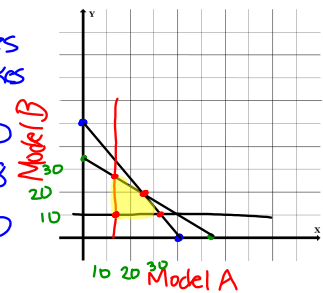
A manufacturer produces two models of mountain bicycles. The time (in hours) required for assembling and painting each model are given in the following table:

	Model A	Model B
Assembling	5	4
Painting	2	3

The maximum total weekly hours available in the assembly department and the paint department are 200 hours and 108 hours, respectively. The manufacturer must produce at least 12 of Model A and 10 of Model B. The profits per unit are \$25 for model A and \$15 for model B. How many of each type should be produced to maximize profit?

Sep 21-9:38 AM

$x = \# \text{ Model A bikes}$
 $y = \# \text{ Model B bikes}$
 $5x + 4y \leq 200$
 $2x + 3y \leq 108$
 $x \geq 12 \quad y \geq 10$
 $P = 25x + 15y$



Sep 21-9:49 AM