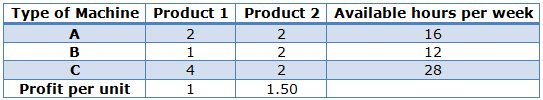
**Exercise #1:** A workshop has three (3) types of machines A, B and C; it can manufacture two (2) products 1 and 2, and all products have to go to each machine and each one goes in the same order; First to the machine A, then to B and then to C. The following table shows:

* The hours needed at each machine, per product unit
* The total available hours for each machine, per week
* The profit of each product per unit sold



Formulate and solve using the graphical method a Linear Programming model for the previous situation that allows the workshop to obtain maximum gains

**Exercise #2:** A company produces two different products. One of them needs 1/4 of an hour of assembly work per unit, 1/8 of an hour in quality control work and US$1.2 in raw materials. The other product requires 1/3 of an hour of assembly work per unit, 1/3 of an hour in quality control work and US$0.9 in raw materials. Given the current availability of staff in the company, each day there is at most a total of 90 hours available for assembly and 80 hours for quality control. The first and second products described have a market value (sale price) of US$9.0 and $\* per unit respectively. In addition, the maximum amount of daily sales for the first product is estimated to be 200 units, without there being a maximum limit of daily sales for the second product.

Formulate and solve graphically a Linear Programming model that will allow the company to maximize profits