Ex.

A toy company manufactures two types of toy vehicles: racing cars and sport-utility vehicles. Because the supply of materials is limited, no more than 40 racing cars and 60 sport-utility vehicles can be made each day. However, the company can make 70 or more vehicles, in total, each day. It costs $8 to make a racing car and $12 to make a sport-utility vehicle. There are many possible combinations of racing cars and sport-utility vehicles that could be made. The company wants to know what combinations will result in the **minimum and maximum** costs, and what those costs will be.

a) Assign variable and determine restrictions

b) Write inequalities



c) Rearrange for calculator

d) Graph

e) Find intersection points using calculator

f) Test points for min and max