Homework 8   Picturing Pictures

Hassan is an artist who specializes in geometric designs. He is trying to get ready for a street fair next month.

Hassan paints both watercolors and pastels. Each type of picture takes him about the same amount of time to paint. He figures he has time to make a total of at most 16 pictures.

The materials for each pastel will cost him $5 and the materials for each watercolor will cost him $15. He has $180 to spend on materials.

Hassan makes a profit of $40 on each pastel and a profit of $100 on each watercolor.

1. Use symbols to represent Hassan's constraints.

2. Make a graph that shows Hassan's feasible region; that is, the graph should show all the combinations of watercolors and pastels that satisfy his constraints.

3. For at least five points on your graph, find the profit that Hassan would make for that combination.

A student at West High School in Tracy, CA, explains a plot for **Picturing Cookies —Part 1.**