Identifying Constraints and Interpreting Solutions

Name_____ Class Period_____

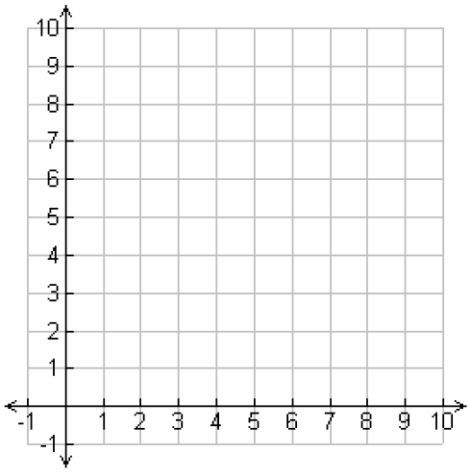
Constraints in Decision Making – Beth's Bags

Beth is at a store having a sale on purses. The big purses are going for $20 each, and the small purses are going for $10 each. She has $80 to spend.

1. Write an equation using 2 variables to represent Beth's purchasing decision.
   Use b = number of big purses and s = number of small purses

2. Solve your equation in terms of the number of big purses, b.

3. Graph the equation you just came up with in problem #2.



4. How many big purses can she get if she buys 3 small purses?

5. How many small purses can she buy if she buys 2 big purses?

6. Is it possible for her to buy 3 of each kind of purse?