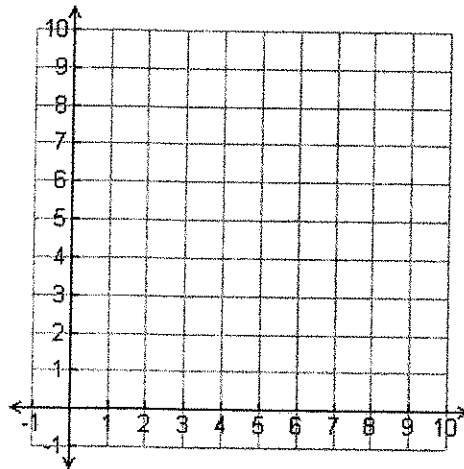


Homework**Constraints in Decision Making – Beth's Bags**

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. Define your variables. b = number of big purses 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?