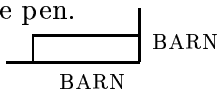


Homework 9

(due March 8, along with HW10a)

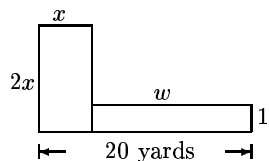
Math 130 *Kovitz* 2018

- Find the largest area that a farmer can enclose by constructing a rectangular pen from 40 feet of fencing, if he uses a corner of his barn for two walls of the pen.



- Find two numbers whose product is a maximum, under the condition that the sum of half the first number and ten times the second number is 100.

What is the maximum product that these two numbers produce?



- A garden is to be constructed in a lot 20 yards wide in the following way. A rectangle that is twice as deep as it is wide will be laid out next to a path that is one yard deep. (See the diagram.) What is the smallest possible total area of the garden and the path? What are the dimensions of the rectangle and the path in that case?