MTH 135 UNIT 8, CH. 12 SUPPLEMENTARY PROBLEMS

1. Suppose the height , h (in feet) of a baseball t seconds after it's thrown is given by the equation $h = -16t^2 + 80t + 20$. Answer the following questions.

a.) When will the baseball reach its highest point?

b.) How high will the baseball go?

c.) How high is the baseball after 2 seconds.

d.) When will the baseball be 150 feet high?

e.) How high off the ground was the baseball when it was thrown?

f.) When will the baseball hit the ground?

2. The outside measurements of a picture frame are 10 inches by 12 inches. The frame has the same width all the way around. The area of the picture is 24 square inches. What is the width of the frame?

3. Suppose Tenera is planting a small vegetable garden next to a building. She has 12 feet of fencing to keep the animals out. What are the dimensions of the largest rectangle she can enclose if she uses the building for one side of the rectangle?