Context Quadratics WS #2

Fenced on three sides:

For problem #1, a builder is designing a rectangular parking lot. She has 200 feet of fencing to enclose the lot on three sides. Fill in the table for different values of *w*, then write a final function *A(w)* for the area of the lot as a function of the width, *w*. For problems 2-4, you only need to write the function for *A(w)* when given the amount of fencing available.

1)

Width (ft)	*Length (ft)*	*Area (ft)*
20		
50		
60		
75		
w		

A(w) =

2) 120 feet of fencing.

3) 500 feet of fencing

4) 60 feet of fencing

For problems 5 – 7, you are given the initial velocity and initial height of a projectile. Write a function *h(t)* for the height of the object after *t* seconds.

5) initial height = 60 feet
initial velocity = 85 ft/sec

6) initial velocity = 25 ft/sec
initial height = 80 feet

7) initial height = 100 feet
initial velocity = 120 ft/sec

Fenced on four sides:

For problem #9, a builder is designing a rectangular parking lot. She has 200 feet of fencing to enclose the lot on all four sides. Fill in the table for different values of *w*, then write a final function *A(w)* for the area of the lot as a function of the width, *w*. For problems 10 - 12, you only need to write the function for *A(w)* when given the amount of fencing available.

9)

Width (ft)	*Length (ft)*	*Area (ft)*
20		
50		
60		
75		
w		

A(w) =

10) 120 feet of fencing.

11) 500 feet of fencing

12) 60 feet of fencing