Your name: _		
MTH 132-020	Calculus I	F18

$\label{eq:Quiz 8} \textbf{Quiz 8}$ Show all you work and justify your answers

A 180 m^2 rectangular pea patch is to be enclosed by a fence and divided into four equal parts by three additional fences parallel to one of the sides. What dimensions for the outer fence will require the smallest amount of total length of fence? How much fence will be needed?