

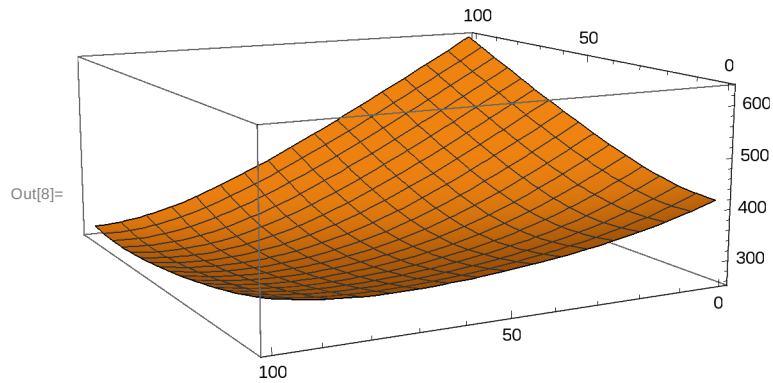
In[2]:= L = 100

Out[2]= 100

In[3]:= t[x1_, x2_] :=

Sqrt[(L/3)^2 + x1^2] + 2 * Sqrt[(L/3)^2 + (x2 - x1)^2] + 3 * Sqrt[(L/3)^2 + (L - x2)^2]

In[8]:= Plot3D[t[x1, x2], {x1, 0, L}, {x2, 0, L}]



In[9]:= D[t[x1, x2], x1]

Out[9]=
$$\frac{x1}{\sqrt{\frac{10000}{9} + x1^2}} - \frac{2(-x1 + x2)}{\sqrt{\frac{10000}{9} + (-x1 + x2)^2}}$$

In[10]:= NSolve[{D[t[x1, x2], x1] == 0, D[t[x1, x2], x2] == 0}, {x1, x2}]

Out[10]= {{x1 -> 72.416, x2 -> 89.4097}, {x1 -> 72.416, x2 -> 89.4097}}