

Some of my calculator Screens for Part d on the Beach Problem

$$2500 + \int_0^x \left( \frac{15 \cdot t}{1 + 3 \cdot t} - \left( 2 + 5 \cdot \sin \left( \frac{4 \cdot \pi \cdot t}{25} \right) \right) \right) dt$$

$$Y(x) = 2500 + \int_0^x \frac{15t}{1 + 3t} - \left( 2 + 5 \sin \frac{4\pi t}{25} \right) dt$$

The other line you see is  $f(x) = 2500$  for reference  
Set the Window to  $0 \leq x \leq 6$ ,  $2480 \leq y \leq 2520$

