1. Let $\mathcal{I} = \int_0^{1.2} \tan(x^2)\, dx$
   (a) Sketch the region determined by the definite integral
   (b) Compute L_{20}. How accurate is your answer?
   (c) Use a righthand sum to approximate $\mathcal{I}$ accurate within 0.01

2. Let $\mathcal{I} = \int_{-1.2}^{0} \tan(x^2)\, dx$
   (a) Sketch the region determined by the definite integral
   (b) Compute T_{20}. How accurate is your answer?
   (c) Use a midpoint sum to approximate $\mathcal{I}$ accurate within 0.01

3. For each integral above, calculate S_{20}. Compare to your approximations above.