

Instructions: Show Your Work!

1. (3 pts) Evaluate

$$\sum_{i=3}^{20} (i - 6)$$

2. (3 pts) Use areas to find the integral

$$\int_{-4}^0 |2x + 6| dx$$

3. (4 pts) Consider the function G defined as

$$G(x) = \int_x^0 \cos \sqrt{t} dt$$

Find the intervals where this function is increasing.
