Student ID:

Student Name:

Serial Number:

MATH102, Section 1 Spring 2018, Term 172 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.