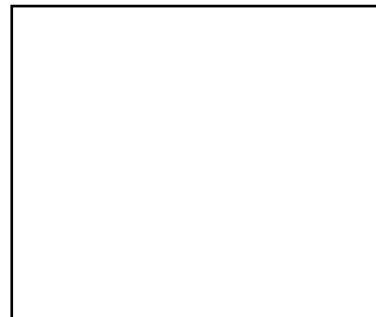


## Calculus Homework Assignment 6

Class 班: \_\_\_\_\_

Student Number 學號: \_\_\_\_\_

Name 姓名: \_\_\_\_\_



1. Which formula is not equivalent to the other two?

a.  $\sum_{k=2}^4 \frac{(-1)^{k-1}}{k-1}$  b.  $\sum_{k=0}^2 \frac{(-1)^k}{k+1}$  c.  $\sum_{k=-1}^1 \frac{(-1)^k}{k+2}$

[§5.2 #9]

2. Evaluate the sum.

$$\sum_{k=7}^{30} (\sqrt{k-4} - \sqrt{k-3})$$

[§5.2 #35]

3. Suppose that  $f$  is integrable and that  $\int_0^3 f(z) \, dz = 3$

and  $\int_0^4 f(z) \, dz = 7$  Find

a.  $\int_3^4 f(z) \, dz$

b.  $\int_4^3 f(t) \, dt$

4. Graph the integrals and use unknown area formulas to evaluate the integrals.

$$\int_{-1}^1 (2 - |x|) \, dx$$

[§5.2 #35]

[§5.2 #35]