

Math 241 Worksheet 13 (two-sided)

Name: _____

Section (circle one): **3** **4**

1. Expand the following sums.

(a) $\sum_{k=1}^4 \frac{12}{k}$

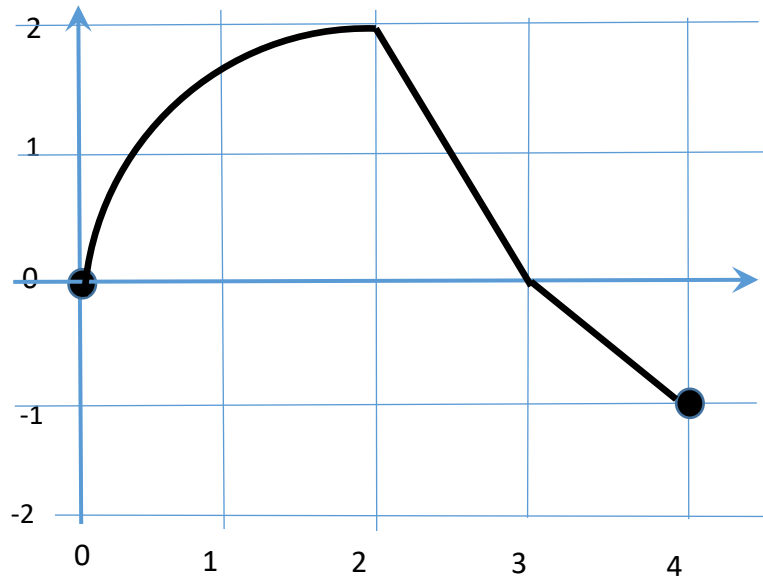
(b) $\sum_{k=0}^3 k^3$

2. Express the following sums in sigma notation.

(a) $4 + 6 + 8 + 10 + 12$

(b) $10 + 100 + 1000 + 10000 + 100000 + 1000000$

3. Based on the following graph of f , what are the values of the following definite integrals, just using geometry?



(a) $\int_0^2 f(x) dx$

(b) $\int_2^3 f(x) dx$

(c) $\int_3^4 f(x) dx$

(d) $\int_0^4 f(x) dx$