

(C1-6.7) Name:

Homework Questions 7 – Sigma Notation

1. Rewrite the following sums using the sigma notation

a) $2 + 8 + 14 + 20 + \dots + 74$

b) $96 + 89 + 82 + 75 + \dots + 19$

c) Multiples of 4 less than 50

d) $8 + 12 + 16 + 20 + 24$

2. Calculate the following

a) $\sum_{r=1}^{r=7} r^2$

b) $\sum_{r=1}^{r=5} 2r + 1$

c) $\sum_{r=1}^{r=10} r^2 - 3$

h) $\sum_{r=1}^{r=4} (r - 6)^2$

3. For what values of n does $\sum_{r=1}^n (n^2 + 5)$ first exceed 500?

4. For what value of n would $\sum_{r=1}^n (25 - 6r) = 7$