

Math 1010 December 4, 2006 Homework 29

Do 9.1 # 1-35 odds

Write the general term for the following sequences

1. $1, 5, 9, 13, 17, \dots$

2. $\frac{1}{2}, \frac{3}{3}, \frac{5}{4}, \frac{7}{5}, \dots$

3. $1, -3, 5, -7, 9, -11, \dots$

Expand the following series

4. $\sum_{k=1}^4 k^2$

5. $\sum_{k=0}^5 (-1)^k (3k + 2)$

Write the following in sigma notation

6. $1 + 5 + 9 + 13 + 17$

7. $2 + 4 + 8 + 16 + 32 + 64 + 128 + 256$

8. $\frac{1}{3} - \frac{1}{9} + \frac{1}{27} - \frac{1}{81}$