Math 1050 - Quiz 5

1. Which of the following is $3+5+7+9+...+51$ in sigma notation? (Choose one.) *[*

a) $\sum_{n=3}^{51} n$

b) $\sum_{n=1}^{17} 3n$

c) $\sum_{n=1}^{25} (2n+1)$

d) $\sum_{n=1}^{26} (2n-1)$

2. Evaluate $\sum_{k=2}^{5} (3k-4)^2$.

3. Find the common difference and the *29*-th term for the following arithmetic sequence.

$4, 7, 10, 13, ...$

4. Find the common ratio and the *17*-th term for the following geometric sequence.

$-48, 24, -12, 6, ...$

5. Find the coefficient of the x^4 term in the binomial expansion of $(3x-2)^7$.

6. Find the coefficient of the x^8 term in the binomial expansion of $\left(x^2 - \frac{2}{x}\right)^7$.