Name : _____

Evaluate: Series

Evaluate each series.

1) $\displaystyle\sum_{y=1}^{7} \left(\frac{2}{3}\right)^y$

2) $\displaystyle\sum_{k=1}^{6} \left(5 \cdot (\sqrt{5})^{k+1}\right)$

3) $\displaystyle\sum_{q=1}^{15} (-2q + \text{...} 1)$

5) $\displaystyle\sum_{x=1}^{9} (8x^2 - 3 \text{...} 5)$

7) $\displaystyle\sum_{f=1}^{4} \frac{1}{3}(f(f+1)(4f-1))$

8) $\displaystyle\sum_{g=1}^{13} (16 - g^2)$