Assignment: Sigma Notation   Date_____

Evaluate each arithmetic series described.

1) $\displaystyle\sum_{m=1}^{15}\left(10m-18\right)$

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

3) $\displaystyle\sum_{m=1}^{10}\left(10-4m\right)$

4) $\displaystyle\sum_{i=1}^{5}\left(5i+3\right)$

5) $\displaystyle\sum_{i=4}^{18}\left(9i-6\right)$

6) $\displaystyle\sum_{n=5}^{12}\left(4n-3\right)$

7) $\displaystyle\sum_{i=3}^{9}\left(6i-6\right)$

8) $\displaystyle\sum_{m=3}^{15}\left(6m+1\right)$

Determine the number of terms *n* in each arithmetic series.

9) $\displaystyle\sum_{m=1}^{n}\left(4m-12\right)=4500$

10) $\displaystyle\sum_{k=1}^{n}\left(\frac{2}{3}+\frac{1}{3}k\right)=50$

Answers to Assignment: Sigma Notation (ID: 1)

1) 930

2) 77

3) −120

4) 90

5) 1395

6) 248

7) 210

8) 715

9) 50

10) 15