

Name : _____

Partial Sum of the Series

L1S1

Find the indicated partial sum of each series.

1) $\sum_{n=1}^{\infty} (700 - n) ; S_5$

2) $\sum_{n=1}^{\infty} (20 - n^2) ; S_7$

3) $\sum_{n=1}^{\infty} \left(\frac{n}{n+1} \right) ; S_4$

4) $\sum_{n=1}^{\infty} (8n^3 - 10n) ; S_6$

5) $\sum_{n=1}^{\infty} (n + 7.2) ; S_8$

6) $\sum_{n=1}^{\infty} (14n + 3n^2) ; S_3$

7) $\sum_{n=1}^{\infty} 5n^2 ; S_2$

8) $\sum_{n=1}^{\infty} (2 - n^3) ; S_9$

Name : _____

Answer key

Partial Sum of the Series

L1S1

Find the indicated partial sum of each series.

1) $\sum_{n=1}^{\infty} (700 - n) ; S_5$

3485

2) $\sum_{n=1}^{\infty} (20 - n^2) ; S_7$

0

3) $\sum_{n=1}^{\infty} \left(\frac{n}{n+1} \right) ; S_4$

$\frac{163}{60}$ or $2\frac{43}{60}$

4) $\sum_{n=1}^{\infty} (8n^3 - 10n) ; S_6$

3318

5) $\sum_{n=1}^{\infty} (n + 7.2) ; S_8$

93.6

6) $\sum_{n=1}^{\infty} (14n + 3n^2) ; S_3$

126

7) $\sum_{n=1}^{\infty} 5n^2 ; S_2$

25

8) $\sum_{n=1}^{\infty} (2 - n^3) ; S_9$

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