Name : _____

Geometric Series

T2S1

Determine the number of terms(n) in each geometric series.

1) $\sum_{k=1}^{n} (5 \cdot 2^{k-1}) = 163835$

2) $\sum_{c=1}^{n} (-6 \cdot (-3)^{c}) = -265716$

3) $\sum_{z=1}^{n} (-8 \cdot 5^{z+1}$ 2015539

5) $\sum_{d=1}^{n} (-1.6 \cdot (-$ $2)^{f}\right) = \frac{4095}{2}$

7) $\sum_{q=1}^{n} (\sqrt{5})^{q} = 19531\sqrt{5} + 19530$

8) $\sum_{w=1}^{n} (-9)^{w+1} = 478305$

Name : _____ **Answer key**

Geometric Series

T2S1

Determine the number of terms(n) in each geometric series.

1) $\sum_{k=1}^{n} (5 \cdot 2^{k-1}) = 163835$

n = 15

2) $\sum_{c=1}^{n} (-6 \cdot (-3)^{c}) = -265716$

n = 10

3) $\sum_{z=1}^{n} (-8 \cdot 5^{z+1}$ 2015539

n = **= 9**

5) $\sum_{d=1}^{n} (-1.6 \cdot (-$ $2)^{f}\right) = \frac{4095}{2}$

n = **= 12**

7) $\sum_{q=1}^{n} (\sqrt{5})^{q} = 19531\sqrt{5} + 19530$

n = 13

8) $\sum_{w=1}^{n} (-9)^{w+1} = 478305$

n = 5