Name : _____

# Geometric Series



1) The first term and the common ratio of a geometric progression are 5 and –8 respectively. The sum of the terms of the series is –9320675. Find the number of terms in the series.

2) The sum of the first 6 terms of a geometric series is $-\frac{91}{2}$. The common ratio of the series is –3. Find the first term.

3) The sum of the ... sion 2 + 8 + 32 + ... is 174762. Find ...

4) Find the first te... the first 5 terms of the series is $\frac{46}{...}$ ... is 8.



5) How many terms are there in the geometric progression whose first term and the common ratio are $9\sqrt{7}$ and 9 respectively. If the sum of the terms is $5380839\sqrt{7}$ ?

Name : _____

**Answer key**

# Geometric Series

Sheet 1

1) The first term and the common ratio of a geometric progression are 5 and –8 respectively. The sum of the terms of the series is –9320675. Find the number of terms in the series.

**number of terms = 8**

2) The sum of the first 6 terms of a geometric series is $-\frac{91}{2}$. The common ratio of the series is –3. Find the first term.



3) The sum of the ... sion 2 + 8 + 32 + ... is 174762. Find ...

4) Find the first te... the first 5 terms of the series is $\frac{46}{...}$ ... is 8.

**first term = $\frac{1}{2}$**

5) How many terms are there in the geometric progression whose first term and the common ratio are $9\sqrt{7}$ and 9 respectively. If the sum of the terms is $5380839\sqrt{7}$ ?

**number of terms = 7**