

Handout : Geometric Conflicts & Issues

1. Find the common ratio for the sequence: $\frac{1}{2}, \frac{5}{12}, \frac{25}{72}, \dots$
2. List the next 2 terms of the geometric sequence: $3, 5, \frac{25}{3}, \dots$
3. List the first 4 terms of the geometric sequence given by $\{a_n\} = 5 \left(\frac{1}{5}\right)^{n-1}$.
4. Find the rule for the geometric sequence $2, \frac{1}{3}, \frac{1}{18}, \dots$
5. Find the rule for the geometric sequence with $a_1 = 12$ and $a_4 = \frac{4}{9}$.
6. Find the sum of the infinite geometric series given by: $\sum_{n=1}^{\infty} \frac{1}{2} (6)^{n-1}$.
7. Find the sum of the infinite geometric series given by: $\sum_{n=1}^{\infty} 3 \left(\frac{1}{6}\right)^{n-1}$.
8. Evaluate $\sum_{n=1}^{\infty} 2(1)^{n-1}$.
9. Evaluate $\sum_{n=1}^4 2 \left(\frac{1}{2}\right)^{n-1}$.
10. Find the third partial sum of the geometric series given by: $\sum_{n=1}^{\infty} 6(3)^{n-1}$.