

Section 3: Geometric sequences and series

Crucial points

1. **Know the formulae**
Make sure that you know the formulae for the k th term of a geometric sequence, the sum of the first n terms of a geometric sequence, and the sum to infinity of a convergent geometric sequence. It's a good idea to make sure you can prove these formulae. This will help you to remember them. See the Notes and Examples.
2. **Beware of simple arithmetical errors**
Be careful if the common ratio of a geometric sequence is negative. Make sure that you are using your calculator correctly to find powers of a negative number – use brackets if necessary.