

Exercise 1

Calc. : ✓

You must justify your answers by writing all calculations that are relevant to your solutions.

1. The 4th term of a geometric series is 10 and the 7th term is 80.

5 marks

Use this information to find the common ratio and the first term for this series and hence find the sum of the first 15 terms.

2. A different series begins by adding the following numbers

5 marks

$$14 + 19 + 24 + \dots$$

How many terms of this series must be added together in order to exceed the sum of the first 15 terms of the geometric series?