Problem 1 – Scatter Plots

For each sequence, write the common ratio and give a description, or sketch, of the scatter plot.

- Sequence B
- Sequence D
- Sequence F

Sequence H

• Sequence J

• Make a conjecture about the scatter plot of a geometric sequence, the common ratio, and/or the sign of the first term of the sequence.

Problem 2 – Explicit Formulas

- Find the 16th term of the geometric sequence with a first term of 2 and common ratio of 1.8.
- Determine a general explicit rule for finding any term of a geometric sequence.

Problem 3 – An Interesting Observation

Work through pages 3.1 and 3.2 and make a conjecture about your findings.

Problem 4 - Sums of Series

- Find the sum of the six terms of the sequence on page 4.2.
- Advance to page 4.4 to find the sum of the first 10 terms in the sequence shown on page 4.3.

Extension

 Use the Scratchpad to show that each method described on page 5.1 gives the same sum found on page 4.4.

