

Question 17 is an open-response question.

- **BE SURE TO ANSWER AND LABEL ALL PARTS OF THE QUESTION.**
- **Show all your work (diagrams, tables, or computations) in your Student Answer Booklet.**
- **If you do the work in your head, explain in writing how you did the work.**

Write your answer to question 17 in the space provided in your Student Answer Booklet.

- 17 Monelle started an arithmetic sequence. The first four terms of her sequence are shown below.

$$13, 9, 5, 1, \dots$$

- What is the common difference for Monelle's sequence? Show or explain how you got your answer.
- What is the **sixth** term of Monelle's sequence? Show or explain how you got your answer.

Nevin started a geometric sequence. The first four terms of his sequence are shown below.

$$162, 54, 18, 6, \dots$$

- What is the **sixth** term of Nevin's sequence? Show or explain how you got your answer.
- Write an expression that represents the n th term of Nevin's sequence.