Pattern Rules

1. Which of the following might be a rule for this pattern?
The variable n represents the term position.

$$8, 12, 16, 20, ...$$

    A $8n$
    B $4n + 4$
    C $8n + 4$
    D $4n$

2. Which of the following might be a rule for this pattern?

$$5, 10, 20, 40, 80, ...$$

    A   Double each number.
    B   Start at 5 and double each term to get the next term.
    C   Start at 5 and keep adding 5.
    D   Start at 5 and keep adding 5 more each time.

3. Write three pattern rules for this pattern:

$$5, 8, 11, 14, ...$$

Pattern Rules (continued)

4. **a)** Use algebra to write a pattern rule that relates the term position to its value in this linear pattern:

$$7, 13, 19, 25, \ldots$$

b) How could you use the rule to figure out the 15th term?

5. Why can't you be completely sure of the 10th term in the pattern 3, 6, 9, 12, … ?