

Mid-Chapter Review

Arithmetic Sequences

1. The first term of an arithmetic sequence is -32 , and the sequences increases by 5 from term to term.
 - a. Write the general term, in simplified form.

 - b. Write the recursive formula.

2. The first three terms of an arithmetic sequence are $7, 3, -1$.
 - a. Determine the 17th term of the sequence.

 - b. Write the recursive formula.

3. The 7th term of an arithmetic sequence is 35 and the 13th term is 77 .
 - a. Write the general term.

 - b. Use your general term to find the 100th term.

Mixed Sequences

1. Given the sequence below

250, 248, 245, 241, 236, 230, ...

- a. Determine the next 3 terms.

- b. Write the recursive formula.

2. Given the sequence below

5, -7, 17, -31, 65, -127, 257, -511, ...

- a. Determine the next 3 terms.

- b. Write the recursive formula.

3. Given the sequence below

$$\frac{3}{2}, \frac{6}{5}, \frac{9}{10}, \frac{12}{17}, \frac{15}{26}, \frac{18}{37}$$

a. Determine the next 3 terms.

b. Write the general term.

c. Use your general term to determine the 10th term.