

**MY Homework****Lesson 6****Patterns****Homework Helper**Need help? [connectED.mcgraw-hill.com](http://connectED.mcgraw-hill.com)

Tom is allowed to download 3 new songs each week. The table shows the total number of songs he can download for several weeks. Extend the pattern to find the next three terms.

Week	1	2	3	4
Number of Songs	3	6	9	12

$$3, 6, 9, 12, \dots$$

$$+3 +3 +3$$

Each term in the sequence can be found by adding 3 to the previous term.

$12 + 3 = 15$

$15 + 3 = 18$

$18 + 3 = 21$

The next three terms are 15, 18, and 21.

**Practice**

**Algebra** Identify the pattern. Then write the next three terms in each sequence.

1. 5, 10, 20, 40, . . .

\_\_\_\_\_

2. 63, 58, 53, 48, . . .

\_\_\_\_\_

3. 192, 96, 48, 24, . . .

\_\_\_\_\_

4. 4, 11, 18, 25, . . .

\_\_\_\_\_



## Problem Solving

- 5. PRACTICE 1** **Mathematical Make a Plan** Dino's Diner charges \$4 for each sandwich. Carla's Café charges \$8 for each sandwich. Write the total costs of 1, 2, 3, and 4 sandwiches for each restaurant. Then compare the total cost of 4 sandwiches at each restaurant.

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- 6.** Luke always runs 1 lap to warm up for track practice. Alex always runs 3 laps to warm up for track practice. Write the number of total laps ran for 1, 2, 3, and 4 practices for each student. Then compare the total number of laps ran for 3 practices by both students.

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\$8?  
You're full of  
BOLOGNA!



## Vocabulary Check



- 7.** Fill in each blank with the correct word to complete each sentence.

A sequence is a list of numbers that follow a specific \_\_\_\_\_.

Each number in the list is called a \_\_\_\_\_.

## Test Practice

- 8.** Which represents the next three terms in the sequence 8, 16, 24, 32, ... ?
- (A) 36, 40, 44      (C) 40, 48, 56  
(B) 64, 128, 256      (D) 72, 216, 648