Problem-Solving Investigation: Look for a Pattern

MAIN IDEA

- Solve problems by looking for a pattern.

EXAMPLE

Solve. Use the *look for a pattern* strategy.

BAND **One marching band formation calls for 12 band members in the front row. Each row in the formation has 3 more members than the row in front of it. Make a list of the members in each of the first 8 rows.**

UNDERSTAND You know there are ☐ band members in the front row, and each row has ☐ more members than the row in front of it. You need to find how many band members are in each of the first ☐ rows.

PLAN Start with 12 members in the front row and use pattern of adding 3 for each row.

SOLVE

1: 12

2: $12 + 3 = $ ☐

3: ☐ $+ 3 = $ ☐

4: ☐ $+ 3 = $ ☐

5: ☐ $+ 3 = $ ☐

6: ☐ $+ 3 = $ ☐

7: ☐ $+ 3 = $ ☐

8: ☐ $+ 3 = $ ☐

The number of band members in the first 8 rows is

☐

CHECK Check the pattern of adding 3 by starting with the eighth row and subtracting 3 for each previous row.

Check Your Progress **WEIGHTS** Josiah lifts weights every day. If he lifts 20 pounds on the bench press on the first day and adds 2 pounds each day, how many days will it take him to lift 50 pounds?

HOMEWORK ASSIGNMENT

Page(s): _____

Exercises: _____