



Name _____ Date _____

**Skills Maintenance****Patterns****Activity 1**

Fill in the missing numbers in each of the patterns.

Model 100, 90, 80, 70, 60, 50, 40

- 2, _____, 6, _____, 10, 12, 14, _____, _____
- _____, 6, 9, _____, 15, _____, 21, 24, 27
- 75, 70, 65, _____, 55, _____, _____, 40, _____
- 7, 12, 17, 22, _____, _____, 37, 42, _____, 52
- 800, 700, _____, 500, _____, 300, 200, _____
- 119, 121, _____, 125, 127, _____, 131, _____

Name _____ Date _____

Apply Skills Algebraic Patterns

Activity 1

Write the algebraic pattern using variables. Then tell how many circles there will be in a certain box in the pattern.

1. What is the algebraic pattern shown below? _____
How many circles will there be in the 15th box? _____

Box 1	Box 2	Box 3	Box 4	Box 5
○	○○	○○○	○○○○	○○○○○

2. What is the algebraic pattern shown below? _____
How many circles will there be in the 10th box? _____

Box 1	Box 2	Box 3	Box 4	Box 5
○○○	○○○○○○	○○○○○○○ ○○○	○○○○○○○ ○○○○○○○	○○○○○○○ ○○○○○○○ ○○○○○○○ ○○○

3. What is the algebraic pattern shown below? _____
How many circles will there be in the 9th box? _____

Box 1	Box 2	Box 3	Box 4	Box 5
○○○○	○○○○ ○○○○	○○○○ ○○○○ ○○○○	○○○○ ○○○○ ○○○○ ○○○○	○○○○○ ○○○○○ ○○○○○ ○○○○○ ○○○○○

4. What is the algebraic pattern shown below? _____
How many circles will there be in the 8th box? _____

Box 1	Box 2	Box 3	Box 4	Box 5
○○○○○	○○○○○ ○○○○○	○○○○○ ○○○○○ ○○○○○	○○○○○ ○○○○○ ○○○○○ ○○○○○	○○○○○ ○○○○○ ○○○○○ ○○○○○ ○○○○○



Name _____ Date _____

 **Problem-Solving Activity**
Another Way to Show Ratios

Use the information to create as many different ratios as you can. Make sure you do these things:

- Write each ratio in horizontal form,
- Write a statement that describes the ratio,
- Tell if the ratio is a part-to-part or part-to-whole relationship.

Model	<p>Miguel’s baseball team has five right-handed pitchers and two left-handed pitchers. There are 25 players on the team.</p> <p>5 : 2 “5 right-handed pitchers to 2 left-handed pitchers” part-to-part ratio</p> <p>5 : 25 “5 right-handed pitchers to 25 players” part-to-whole ratio</p> <p>2 : 25 “2 left-handed pitchers to 25 players” part-to-whole ratio</p>
--------------	---

Unit 4

1. Marcus works at the company that makes phonebooks. There are two parts to the phonebook—the white pages and the yellow pages. There are 275 white pages and 320 yellow pages in a phonebook that is 595 pages long.

2. There are three kinds of seats still left for the next professional basketball playoff game. There are 75 cheap seats, 40 average price seats, and 85 expensive seats left for a total of 200 seats that are not sold for the game.
