Name _____

Practice Video Tools Games

Additional Practice 15-2
More Numerical Patterns

Another Look!

Ira makes a table showing the relationship between the number of yards, feet, and inches. How many feet and inches are in 6 yards? What do you notice about the number of feet and inches?

Step 1

Complete the table.

Yards	Feet	Inches
1	3	36
2	6	72
3	9	108
4	12	144
5	15	180
6	18	216

There are 18 feet or 216 inches in 6 yards.

Step 2

Compare the number of feet to the number of inches to find a relationship.

$3 \times 12 = 36$
$6 \times 12 = 72$
$9 \times 12 = 108$
$12 \times 12 = 144$
$15 \times 12 = 180$
$18 \times 12 = 216$

So, there are 12 inches for every foot.

In **1** and **2**, use the rules "add 12" and "add 6" to help you.

1. Each team in a youth hockey league has 12 forwards and 6 defensemen. Complete the table to show how many forwards and defensemen are on 6 teams.

Team	Forwards	Defensemen
1		
2		
3		
4		
5		
6		

2. What relationship do you notice between the number of forwards and the number of defensemen?

3. Jamie makes a table to show the relationship between meters, centimeters, and millimeters. Use the rule "add 100" to complete the column for the number of centimeters. Then use the rule "add 1,000" to complete the column for the number of millimeters. How many centimeters are in 15 meters? How many millimeters?

Meters	Centimeters	Millimeters
1	100	1,000
2		
3		
4		
5		

4. Higher Order Thinking The distance between Jamie's house and her friend's house is 75 meters. If Jamie walks to her friend's house and back, how many centimeters does she walk? Explain.

5. Look for Relationships What relationship do you notice between the number of centimeters and the number of millimeters?

---

6. A recipe for bread uses $5\frac{3}{4}$ cups of white flour and $3\frac{1}{3}$ cups of wheat flour. How many more cups of white flour than wheat flour are used in the recipe? Write an equation and complete the bar diagram to solve.

Assessment Practice

At Ashley's Nursery, there are 12 rows of trees. In each row, there are 21 pine trees and 7 spruce trees. Make a table to help you solve the following.

7. How many of each type of tree are there in all?

Ⓐ 252 pine trees; 84 spruce trees

Ⓑ 231 pine trees; 74 spruce trees

Ⓒ 84 pine trees; 252 spruce trees

Ⓓ 33 pine trees; 19 spruce trees

8. Which of the following are true statements about the relationship between the number of pine trees and spruce trees?

☐ There are always 14 more pine trees than spruce trees.

☐ There are always 3 times as many spruce trees as pine trees.

☐ There are always 3 times as many pine trees as spruce trees.

☐ There are always $\frac{1}{3}$ as many spruce trees as pine trees.