

Lesson 1-5 • Group 2

Reinforce Understanding**1.5 Small Group • Group 2**

I can find patterns and pattern rules, use them to make generalizations, and check my solutions with a table of values, explain why the method works, and use it on a problem I have not seen before.

Worked model

A change jar is full of pennies, nickels, dimes, and quarters worth \$53.50 in total. How many of each coin could there be?

1. Each penny has a value of \$0.01, so 100 pennies have a value of \$1.00.
2. Each nickel has a value of \$0.05, so 100 nickels have a value of \$5.00. Each dime has a value of \$0.10, so 100 dimes have a value of \$10. Each quarter has a value of \$0.25, so 100 quarters have a value of \$25.
3. I multiply the number of each coin by its value. And I notice a generalization: because the jar's total, \$53.50, ends in 0, the number of pennies can only be a multiple of 5.

Practice

Complete each exercise. Show the reasoning that supports your answer.

1. Player A starts with 18 points and makes two-pointers. Complete the table.

Complete the table. Show how you found each value.

Two-pointers made	Rule: $18 + 2 \times \text{shots}$	Total points
1		
5		
10		

Show your work

2. Match each input-output table to its pattern rule.

Write the letter of the matching item on each line.

1. _____ In: 1, 2, 3 → Out: 5, 10, 15
 2. _____ In: 1, 2, 3 → Out: 3, 5, 7
 3. _____ In: 2, 4, 6 → Out: 1, 2, 3
 4. _____ In: 1, 2, 3 → Out: 2.5, 5, 7.5
- A Multiply by 5
 - B Double, then add 1
 - C Divide by 2
 - D Multiply by 2.5