NAME _____ DATE _____ PERIOD _____

Enrich

Operations Puzzles

Now that you have learned how to evaluate an expression using the order of operations, can you work backward? In this activity, the value of the expression is given. It is your job to decide what operations or numbers must be in order to arrive at that value.

Fill in each ☐ with +, −, ×, or ÷ to make a true statement.

1. 48 ☐ 3 ☐ 12 = 12

2. 30 ☐ 15 ☐ 3 = 6

3. 24 ☐ 12 ☐ 6 ☐ 3 = 4

4. 24 ☐ 12 ☐ 6 ☐ 3 = 18

5. 4 ☐ 16 ☐ 2 ☐ 8 = 24

6. 45 ☐ 3 ☐ 3 ☐ 9 = 3

7. 36 ☐ 2 ☐ 3 ☐ 12 ☐ 2 = 0

8. 72 ☐ 12 ☐ 4 ☐ 8 ☐ 3 = 0

Fill in each ☐ with one of the given numbers to make a true statement. Each number may be used only once.

9. 6, 12, 24

☐ ÷ ☐ × ☐ = 12

10. 4, 9, 36

☐ × ☐ − ☐ = 0

11. 6, 8, 12, 24

☐ ÷ ☐ + ☐ − ☐ = 4

12. 2, 5, 10, 50

☐ ÷ ☐ − ☐ + ☐ = 50

13. 2, 4, 6, 8, 10

☐ ÷ ☐ × ☐ + ☐ − ☐ = 0

14. 1, 3, 5, 7, 9

☐ ÷ ☐ + ☐ − ☐ ÷ ☐ = 1

15. **CHALLENGE** Fill in each ☐ with one of the digits from 1 through 9 to make a true statement. Each digit may be used only once.

☐ ÷ ☐ × ☐ + ☐ × ☐ × ☐ ÷ ☐ + ☐ × ☐ = 100