



**Problem 1 – The Right Combination**

Use the first four numbers given, with the 4 operations (+, −, ×, ÷) and parentheses, to arrive at the given answer.

1. 6 6 2 1 Answer: 4

2. 3 2 2 5 Answer: 2

3. 3 6 1 2 Answer: 5

4. 2 3 5 2 Answer: 1

5. With a partner, compare the number sentences for Exercises 1–4. Did you come up with the same sentence? If not, are both correct? \_\_\_\_\_

\_\_\_\_\_

6. Sarah is given the numbers 4, 1, 2, and 4 to make 6. She has entered the following number sentence on her calculator. Will she get the expected 6? If not, how can she correct her mistake? \_\_\_\_\_

\_\_\_\_\_

$4+(1+4)/2$

7. Steven and Jalil are discussing their results. For the numbers 6, 6, 4, and 1, they are supposed to create a result of 4. Steven has entered the first line and Jalil entered the second line. Is either correct? Explain. \_\_\_\_\_

\_\_\_\_\_

$(6+6)/4+1$   
 $6/(6-4)+1$

8. Ayana was given the numbers 4, 1, 5, and 5 to total 3. She thinks all the following are possible number sentences. Do you agree? Explain.

$(5+4)-5-1 = 3$

$(5-5)+(4-1)$

$5-5+4-1$

$5+4-5-1$

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



**Problem 2 – Where Have all the Parentheses Gone?**

Given, 6, 4, 1, 6 to make 3, Jason, Rosie, and Khemal have all solved this problem differently. Place parenthesis, if needed, to make their number sentence correct.

9. Jason:  $6 + 4 - 6 - 1$  Correct sentence: \_\_\_\_\_

10. Rosie:  $4 \times 1 - 6 \div 6$  Correct sentence: \_\_\_\_\_

11. Khemal:  $6 \div 6 \times 4 - 1$  Correct sentence: \_\_\_\_\_

12. Use the Associate Property to make it easier to see that the answer to Jason's number sentence in Exercise 9 is 3. \_\_\_\_\_

In the following, insert parentheses to make each statement true. Use your calculator to verify.

13.  $5 + 9 \div 7 + 1 = 3$

14.  $2 \times 10 + 6 - 3 \times 6 \div 2 = 23$

15.  $15 \div 5 + 30 \div 6 \times 2 = 13$

16.  $32 \div 2 + 6 + 6 = 10$

17.  $12 \div 4 + 2 \times 8 = 16$

18.  $24 \div 2 + 4 \div 2 = 2$

**Problem 3 – Using Properties**

Complete each equation using the given property. Use the calculator to check your answers.

19. Commutative Property of Addition

$5 + 3 + 2 =$  \_\_\_\_\_

20. Commutative Property of Multiplication

$12 \times 5 =$  \_\_\_\_\_

21. Associative Property of Addition

$(5 + 3) + 2 =$  \_\_\_\_\_

22. Distributive Property

$6 \times (4 + 1) =$  \_\_\_\_\_

23. Associative Property of Multiplication

$7 \times (2 \times 6) =$  \_\_\_\_\_