G3-M3-Lesson 8

1. Solve.

a. $9 - (6 + 3) =$ 0

I know the parentheses mean that I have to add $6 + 3$ first. Then I can subtract that sum from 9.

b. $(9 - 6) + 3 =$ 6

I know the parentheses mean that I have to subtract $9 - 6$ first. Then I can add 3. The numbers in parts (a) and (b) are the same, but the answers are different because of where the parentheses are placed.

2. Use parentheses to make the equations true.

a. $13 = 3 + (5 \times 2)$

I can put parentheses around 5×2. That means I first multiply 5×2, which equals 10, and then add 3 to get 13.

b. $16 = (3 + 5) \times 2$

I can put parentheses around $3 + 5$. That means I first add $3 + 5$, which equals 8, and then multiply by 2 to get 16.

3. Determine if the equation is true or false.

a. $(4 + 5) \times 2 = 18$	*True*
b. $5 = 3 + (12 \div 3)$	*False*

I know part (a) is true because I can add $4 + 5$, which equals 9. Then I can multiply 9×2 to get 18.

I know part (b) is false because I can divide 12 by 3, which equals 4. Then I can add $4 + 3$. $4 + 3$ equals 7, not 5.

4. Julie says that the answer to $16 + 10 - 3$ is 23 no matter where she puts the parentheses. Do you agree?

$(16 + 10) - 3 = 23$ $16 + (10 - 3) = 23$

I agree with Julie. I put parentheses around $16 + 10$, and when I solved the equation, I got 23 because $26 - 3 = 23$. Then I moved the parentheses and put them around $10 - 3$. When I subtracted $10 - 3$ first, I still got 23 because $16 + 7 = 23$. Even though I moved the parentheses, the answer didn't change!