Hi this is Sachin! I am a Student Success Coach and will be explaining some practice problems from the MA001 Algebra course. Today we will review an assigned problem from Unit 1. In the “Homework Assessment” you were asked to solve this problem:

\[-6 \cdot 4(-1)\]

We will use the “order of operations” principles to simplify this expression.

We will approach this problem as follows:

1. Simplify the parenthesis.
2. Eliminate the parenthesis.
3. Carry out the arithmetic operations as per the order of operations.

**Step 1:** Simplify the parenthesis:

There is only one term inside the parenthesis. Therefore, further simplification is not required. After Step 1, the expression becomes

\[-6 \cdot 4(-1)\]

**Step 2:** Eliminate the parenthesis:

As there is no symbol between number 4 and parenthesis, it represents multiplication. Therefore, remove the parenthesis, and replace it by multiplication.

\[-6 \cdot 4 \cdot -1\]

**Step 3:** Carry out the arithmetic operations:

Next step is to perform the multiplication from left to right:

a) \(-6 \cdot 4 = -24\) (Product of a positive number and a negative number is a negative number)

b) \(-24 \cdot -1 = 24\) (Product of two negative numbers is a positive number)

**Conclusion:**

By using the order of operation, the solution for the given expression \(-6 \cdot 4(-1)\) is 24.

Please let me know if you have any question on this problem, or ‘Order of Operations’ generally. I will be here in the forum for the next hour.