

## Lesson 3: Order of Operations

### Goals:

- Use BEDMAS to evaluate math expressions.
- Use BEDMAS when solving word problems.

When mixing operations (add, subtract, multiply, and divide) in the same calculation, you must follow the *order of operations*. The short form of the order of operations is referred to as **BEDMAS**, which states that you perform operations in the following order:

Brackets	Exponents	Divide and Multiply	Add and Subtract
		left to right	left to right

### Example 1

$$3(4 + 7) - 11$$

$$3(11) - 11 = (3 \times 11) - 11 = 33 - 11 = 22$$

### Example 2

$$-3(-4) - 1(-5) + (-2)$$

$$12 + 5 - 2 = 15$$

### Example 3

$$-(2 - (11 - 13))$$

$$-(2 - (-2)) = -(2 + 2) = -4$$

### Example 4

$$\frac{2(11 - 3)}{-(4 - 8)} = \frac{2(8)}{-(-4)} = \frac{16}{4} = 4$$

### Example 5

$$-3(7) + 24 \div -8 - (-2)(-9)$$

$$(-21) + (-3) - (18)$$

$$-24 - 18$$

$$= -42$$