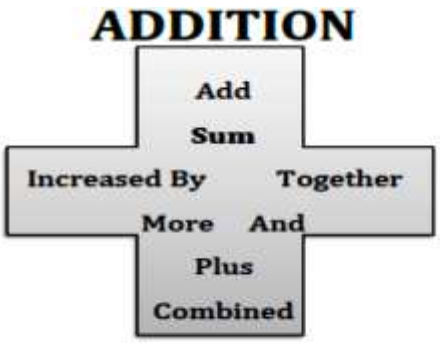
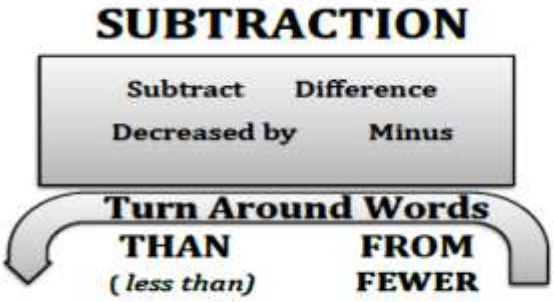
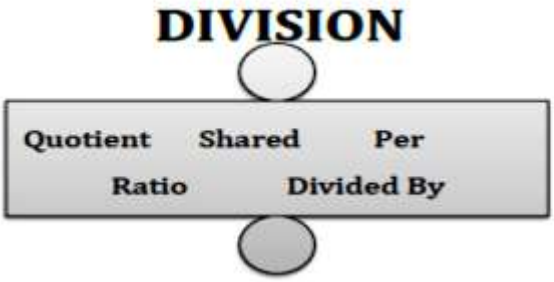
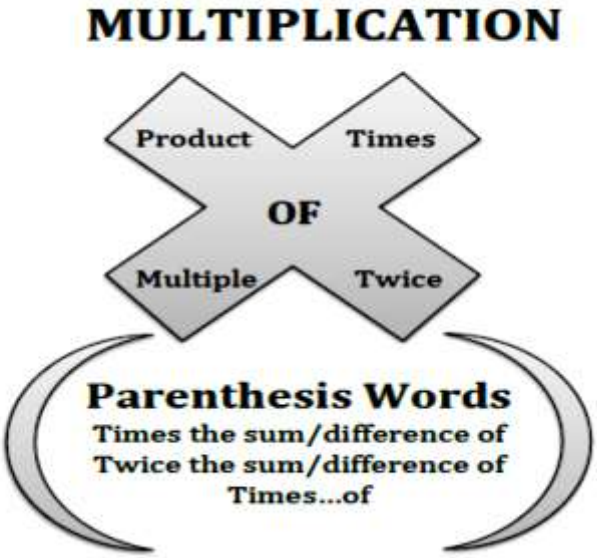
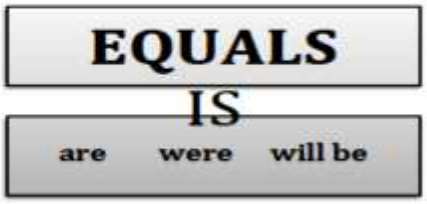
**Unit 1 Function Relationships** **Name_____**
**Day 2 Notes** **Date_____ Hour_____**
**Writing Equations to Model Situations (PH 2-5)**




**<u>In Class Activity</u>**:
Match the expressions, words, and tables. Complete the table below to show your matches.

| Expressions | Words | Tables |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Compare your answers with a partner. Then we will discuss them as a class.

**<u>Examples:</u> Define a variable. Then model each situation with an equation to solve.**

**1.** Brendan withdrew $25 from his bank account at an ATM. The transaction slip said his balance was $243.19. Write and solve an equation to find Brendan's original balance.

**2.** One number is 3 more than twice another number. If the sum if 57, find the numbers.

**3.** Suppose you want to buy a bouquet of yellow roses and baby's breath for $16. The baby's breath costs $3.50 per bunch and roses cost $2.50 each. You want one bunch of baby's breath and some roses for your bouquet. How many roses can you buy?

**4.** The width of a rectangular garden is 8 less than its length. The perimeter of the garden is 24 feet. What are the length and width of the garden.

**5.** Consecutive integers differ by one. The sum of three consecutive integers is 48. Write and solve an equation to find the three integers.

**6.** The sum of two consecutive <u>odd</u> integers is 56. What are the integers?

**<u>Homework:</u>** Unit 1 Day 2 Worksheet

# Matching Expressions, Words, and Tables ACTIVITY

**A**

$$2n+12$$

**B**

$$\frac{n}{2}+6$$

**C**

$$(n+6)^2$$

**D**

$$2n+6$$

**E**

$$(3n)^2$$

**F**

$$n^2+6$$

**G**

Multiply $n$ by two, then add six.

**H**

Multiply $n$ by three, then square the answer.

**I**

Add six to $n$ then square the answer.

**J**

Multiply $n$ by two then add twelve.

**K**

Divide $n$ by two then add six.

**L**

Square $n$, then add six

**M**

| *n* | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| *Ans* | 14 | 16 | 18 | 20 |

**N**

| *n* | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| *Ans* | | | 81 | 144 |

**O**

| *n* | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| *Ans* | | 10 | 15 | 22 |

**P**

| *n* | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| *Ans* | | | 81 | 100 |

**Q**

| *n* | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| *Ans* | | 10 | 12 | 14 |

**R**

| *n* | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| *Ans* | 6.5 | 7 | 7.5 | 8 |

# Matching Expressions, Words, and Tables ACTIVITY

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