

▶ **Math Vocabulary**

Fill in the guided notes as you watch the video in the *Digital Toolbox*.

- Math is a **language**. Learning math **vocabulary** is the first step to understanding word problems, expressions, and equations.
- Word problems often include key vocabulary words that help you determine what **math operation** to use in an expression or equation.

Operation	Key Vocabulary
Multiply	of, product, per (depending on context), twice, times
Divide	quotient, per (depending on context), divided by
Add	and, sum, plus, add, more than, increase
Subtract	difference, minus, subtract, less, less than, decrease
Equality	is, the same as, equal to, total

- When a problem uses the phrase “a number,” this represents an **unknown value**.
- When directions say “write a phrase or sentence with symbols” note that:
 - An **expression** will not have an equal sign.
 - An **equation** will have terms on both sides of an equal sign.

The variable n is used in the examples and practice problems in this skills lesson.

▶ Example 1

Complete the example as you watch the video in the Digital Toolbox.

Write the phrase or sentence with symbols.

- A)** The difference of a number and 7

$$n - 7$$

- B)** The product of a number and 5

$$5n$$

- C)** The sum of a number and 8 is zero

$$n + 8 = 0$$

- D)** The quotient of a number and 10

$$\frac{n}{10}$$

- E)** 34 less than twice a number is 2

$$2n - 34 = 2$$

- F)** Four times the sum of a number and 3 totals 16

$$4(n + 3) = 16$$

 **Practice**

Write the phrase or sentence with symbols. Do not simplify or solve.

- 1) The quotient of a number and 4 is 10

$$\frac{n}{4} = 10$$

- 2) The sum of a number and 7

$$n + 7$$

- 3) The product of a number and 14

$$14n$$

- 4) Nine less than a number is two

$$n - 9 = 2$$

- 5) 12 is decreased by a number

$$12 - n$$

- 6) Three times the sum of a number and 5 is 15

$$3(n + 5) = 15$$

- 7) The product of -7 and a number, plus 12 is the same as -9

$$-7n + 12 = -9$$

- 8) -23 is equal to the product of a number and 2 plus 9

$$-23 = 2n + 9$$

- 9) A number and 8 is 3

$$n + 8 = 3$$

- 10) 15 is divided by a number

$$\frac{15}{n}$$