Math 107

Spring 2017

Lecture 1

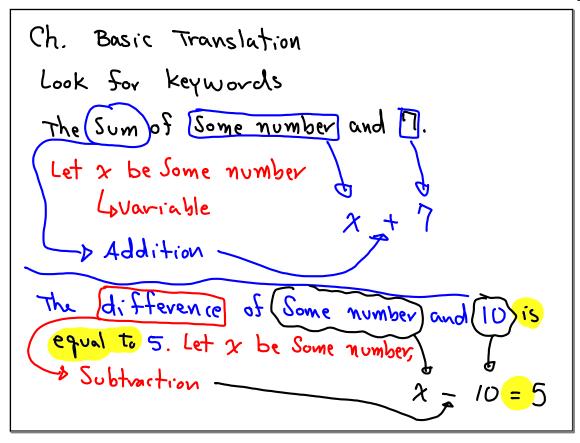Rahim   Faradineh

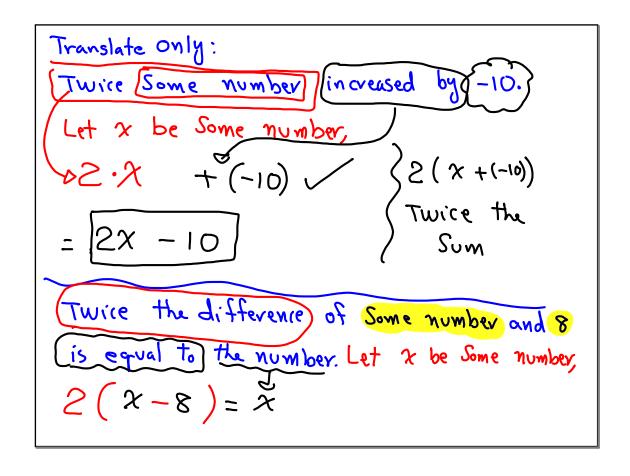rfaradineh @ gmail.com

www. mymathclasses.com

office : G5 - 111Q

This class is designed to help Math 115 students.

Ch. Basic Translation

Look for keywords

The (Sum) of [Some number] and [7].

Let x be Some number
↳ Variable

→ Addition

$x + 7$

The [difference] of (Some number and (10) is

equal to 5. Let x be Some number,

→ Subtraction

$x - 10 = 5$

Translate Only:

[Twice [Some number] (increased by (-10.)

Let x be Some number,

→ $2 \cdot x + (-10)$ ✓

$2(x + (-10))$

Twice the Sum

$= \boxed{2x - 10}$

(Twice the difference) of Some number and 8

is equal to the number. Let x be Some number,

$2(x - 8) = x$

3 times Some number | reduced by | -5

is equal to

the number squared. Let x be Some number,

$$3 \cdot x - (-5) = x^2$$

$$3x + 5 = x^2$$

Difference of A and B → A - B

A less B ——→ A - B

A reduced by B → A - B

A less than B

→ B - A

Added to

Subtracted from

more than

} Reverse them

Less than

fewer than

27 less x^3

27 - x^3

5 added to x

$x + 5$

8 Subtracted
from x^2

$x^2 - 8$

2 more than x

$x + 2$

27 less than x^3

$x^3 - 27$

Square root of some number
is equal to
The number less 2.
Let x be some number,

$$\sqrt{x}$$
$$=$$
$$x - 2$$

$$\sqrt{x} = x - 2$$

the sum of some number and 3,
raised to the second power,
the result is 9 more than the number.
Let x be some number,

$$(x + 3)^2 = x + 9$$

The quotient of some number and 5
is equal to $\frac{1}{2}$.
Let x be some number

x 5

Division

$$\frac{x}{5} = \frac{1}{2}$$

the quotient of some number and 10
is equal to the quotient of 5 and the number
Let x be the number,

$$x \div 10 = 5 \div x$$

$$\frac{x}{10} = \frac{5}{x}$$

The quotient of some number and 3 more than the number is equal to $\frac{3}{4}$.

Place holder for operation.

$$\frac{x}{x+3} = \frac{3}{4}$$

Draw a rectangle, label it such than the length is 1 inch shorter than twice the width.

$W = x$

$L = 2x - 1$