
Translating Words into Math

SOLVING WORD PROBLEMS

TODAY'S GOALS

Our Objective

By the end of today you should feel comfortable tackling any type of word problem.

1) Review HW

2) Start Lesson

3) Practice Skills

FIRST

Let's review some math terms

Variable:

An unknown value represented usually represented by a letter

Inequality:

Shows that one side is different than the other (i.e. one is larger than the other).

Equation:

Something that says two sides are equal

**THERE ARE A FEW WAYS TO
“TRANSLATE”**

VERBAL MODEL

**READ AND ASK YOURSELF
WHAT YOU NEED TO KNOW
TO SOLVE THIS PROBLEM...**

Hint: Learn to ignore useless information.

LABEL MODEL

**FIND YOUR
VARIABLES AND
LABEL THEM**

ALGEBRAIC MODEL

**WRITE AN EQUATION OR
INEQUALITY USING THE
LABELS AND VERBAL
MODEL.**

**LET'S PRACTICE ONE
TOGETHER**

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- You and some friends are at a Chinese restaurant. You order several \$2.00 plates of wontons, egg rolls, and dumplings. Your bill is \$25.20, which includes tax of \$1.20. Use modeling to find out how many plates you ordered.
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USING VERBAL MODEL

- Cost of food + tax = amount paid
 - How do you determine cost of food?
 - Each plate costs \$2.00 so
 - # of plates * \$2.00 = cost of food
 - Final verbal model
 - $\$2.00 * \# \text{ of plates} + \text{tax} = \text{amount paid}$
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USING VERBAL MODEL

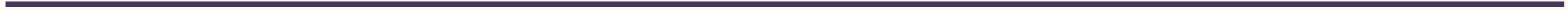
- X = number of plates you purchased
- 2 = amount paid per plate Each plate costs \$2.00 so
- # of plates * \$2.00 = cost of food
- 1.20 = tax paid on food
- 25.20 = amount paid for food and tax



USING VERBAL MODEL

- Substitute the labels for the words in the verbal model
- $\$2.00 * \# \text{ of plates} + \text{tax} = \text{amount paid}$

$$2x + 1.20 = 25.20$$



Melanie's high school played 754 baseball games this year, 113 of the games were played at night. She attended 253 games. How many baseball games did Melanie miss ?

BREAKOUT ROOMS

(5 MINUTES TOGETHER)



LET'S REVIEW

What Next?

