

Applications : MEANS WORD
PROBLEMS

STEPS TO SOLVE APPLICATION PROBLEMS:

1. Underline IMPORTANT
INFORMATION
2. PICK YOUR Variables (x/y)
3. SET UP Equations
4. SOLVE

KEY VOCABULARY

Add, Sum,
+ more, increase,
and,

- Subtract, less,
difference, decrease,
....

x Product,
times, per,
twice x2
tripled x3

÷
quotient
ratio

EXAMPLE #1:

 $y = \$2$ mushroom

Jack bought 3 slices of cheese pizza and 4 slices of mushroom pizza for a total cost of \$12.50.

Grace bought 3 slices of cheese pizza and 2 slices of mushroom pizza for a total cost of \$8.50.

What is the cost of one slice of mushroom pizza?

x - cheese
 y - mushroom

$$\begin{array}{r}
 3x + 4y = 12.50 \\
 -3x + 2y = 8.50 \\
 \hline
 2y = 4 \\
 \frac{2y}{2} = \frac{4}{2}
 \end{array}$$

EXAMPLE #3:

Peter buys two apples and three bananas for \$4. Nadia buys four apples and six bananas for \$8 from the same store. How much does one banana and one apple cost?

x - apples
 y - bananas

Not Enough Info.

$$\begin{array}{r}
 -2(2x + 3y = 4) \\
 4x + 6y = 8 \\
 \hline
 -4x - 6y = -8 \\
 \hline
 0 = 0
 \end{array}$$

Inf. many

Agenda

1. Welcome
2. Tell Me Something Good
3. WARM UP: SYSTEMS
4. NOTES: SYSTEM APPLICATIONS
5. **WALK-AROUND**