

Application Worksheet #3

Objectives:

1. Develop a strategy for translating word problems into mathematical equations.
2. Solving word problems by following the 4-step process outlined in class.

4-Step Process:

1. Write down and label all important information given in the problem, identify unknown quantities and assign variables.
2. Make a guess at the solution and check to see if it is correct. (The purpose of this step is not to stumble upon the answer, but to gain insight into how the quantities are related to each other.)
3. Using the insights gained in step 2, translate the problem into a mathematical equation.
4. Solve the equation and use the solution to answer the question(s) asked.

Example: Marta wrote a check for building materials for \$987, which included 5% sales tax.
What was the cost of the materials before the sales tax was added?

Important Information and unknowns:

Guess and Check		

Equation:

Answer:

1. A car dealership is having a sale where every car is on sale for 15% off. If a used Toyota Camry is currently priced at \$10,412.50, what was the cost of the car before the sale?

Important Information and unknowns:

Guess and Check		

Equation:

Answer:

1. In 2005, Americans spent a total of \$27 billion to remodel bathrooms and kitchens. They spent \$5 billion more on kitchens than they did on bathrooms. How much was spent on each?

Important Information and unknowns:

Guess and Check		

Equation:

Answer: