1.4 One-Variable Word Problems

SWBAT translate and solve one-variable word problems.

Solving Multi-Step Word Problems

Step 1: Read the problem
Step 2: Underline or highlight the question
Step 3: Define the variable
Step 4: Reread the problem and write the equation
Step 5: Solve!

Age (easy): Sammy's mother is 2 years more than 3 times as old as Sammy. Their combined age is 42. How old are Sammy's mother and Sammy?

Age (difficult): Sam's brother is 7 years older than Sam. His mother is 4 less than 3 times Sam's age. Their combined age is 63. How old is Sam, his brother, and his mother?

Initial Amount/Service Charge: Online concert tickets cost $37 each, plus a service charge of $8.50 per ticket. The website also charges a transaction fee of $14.99 for the purchase. You paid $242.49. How many tickets did you buy?

Initial Amount/Service Charge: You work for 4 hours on Saturday and 8 hours on Sunday. You also receive a $50 bonus. You earn $164. How much did you earn per hour?

Perimeter: The perimeter of a rectangular garden is 46. The length is 7 less than 4 times the width. What are the dimensions of the garden?

Perimeter: The perimeter of a triangle is 43 feet. The smallest side is three less than the middle side, and the largest side is two less than twice the middle side. What is the length of the of longest side?