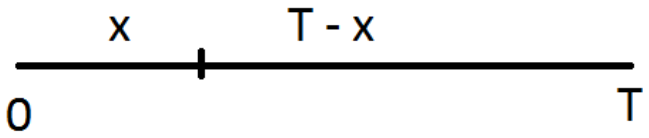
Template for solving word problems

Steps

1. Introduce a variable, say x
    - This variable x is either the answer to the question, or it is a required parameter in determining the answer to the question.
2. Construct formula(s) related to the variable in step (1)
3. Simply the formula(s)
4. Solve

Some helpful tools for working with sums

- Graphical representation of the sum of 2 numbers.
    - Example: graphical representation of two numbers whose sum is T



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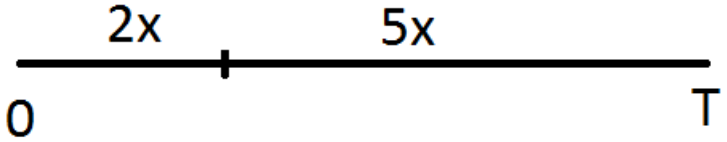
- Algebraic representation of the sum of 2 numbers.
    - Example: algebraic representation of two numbers whose sum is T and their difference is 5:
    - Let x be one of the numbers, then the other number is (x + 5). Therefore we have (x) + (x + 5) = T.
- Graphical representation of ratios, fractions and percentages.
    - Example: graphical representation of two numbers whose sum is T and their ratio is 2:5



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- Algebraic representation of ratios, fractions and percentages.

    - Example: algebraic representation of two numbers whose sum is T and their ratio is 2:5
    - Let 2x and 5x be the numbers, then we have 2x + 5x = T.
- Analysis on graphical representation of sums.
- Know the formula(s) related to the problem(s).