

- 1.2. Applications & Modelling -  
With linear equations

Objectives

- Give guidelines for solving application problems
  - Geometry problems
  - Number problems
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Guidelines.

1. Read the problem carefully.
2. Draw a sketch, label parts with information
3. Determine unknowns, label them with variables  
     $\Delta$  find equation
4. Solve equation
5. Check solution.

Problem 1.

If the length of each side of a square is increased by 3 cm, the perimeter of the new square is 40 cm than twice the length of each side of the original square.

Find the dimensions of the original square

Problem 2 A triangle has perimeter 161 cm. Each of the two smaller sides is two thirds the longest. Find the dimensions of the triangle.

Problem 3

The numerator of a fraction is 4 less than the denominator. If the numerator is increased by 14 & the denominator is decreased by 10 the nbr is 5. Find the original fraction

Problem 4. One fifth of a nbr plus one fourth of the nbr is 5 less than one half of the nbr. What is this nbr?