

**Polya's Four Steps in Problem Solving**

1. Understand the problem.
2. Devise a plan.
3. Carry out the plan and solve the problem.
4. Look back and check the answer.

Example 1: Which necessary piece of information is missing and prevents you from solving the following problem?

The bill for your meal totaled \$20.36, including the tax. How much change should you receive from the cashier?

Example 2: Solve the following problem. If the problem contains information that is not relevant to its solution, identify this unnecessary piece of information.

A manufacturer packages its apple juice in bottles and boxes. A 128-ounce bottle costs \$5.39, and a 9-pack of 6.75-ounce boxes costs \$3.15. Which packaging option is the better value?

Example 3: A television sells for \$950. Instead of paying the total amount at the time of the purchase, the same television can be bought by paying \$200 down and \$100 a month for 14 months. How much is saved by paying the total amount at the time of the purchase?