

Proper Problem Solving Procedure

PPSP, also called **Proper Problem Solving Procedure**, is a simple method for organizing and extracting information in a word problem, and is designed to assist you in the solution of the problem. PPSP should be followed for all word problems unless otherwise expressed. By following PPSP, you ensure a consistent solution for each problem solved, forming a good habit of solving word problems in general.

PPSP consists of several steps, which need to be followed in their correct order.

Step 0. **Read** the word problem thoroughly. **Reread** again for increased understanding.

Step 1. Write all **given** information in the left side of your solution area.
Include all units of measure for all values.
Convert any non-SI units into SI. For example, if you are given a distance in miles, convert to meters.
Draw a line under your last given.

Step 2. Below your given information or data, write out the **needs** of the problem. This is where you write which variable(s) or quantity(ies) you are trying to solve for in the problem.

Step 3. **Choose an equation** that will help you solve for the needs of the problem. You may have to choose more than one equation. In other words, you may to solve for one variable or quantity first in order to solve for the quantity the word problem is actually looking for. There can be several intermediate steps of this nature.

Step 4. **Perform the algebra** of the problem. This is where you manipulate the algebraic equation to get the desired result. Use proper math and algebra skills here. Always double check your algebra.

Step 5. Once the desired variable(s) or quantity(ies) have been determined, **put a box** around your final answer. BE SURE your answer has proper **units** of measure. If in doubt, consult your unit table.

SOME LAST WORDS OF ADVICE:

1. Does your answer seem reasonable? In other words, let's say you were solving for the speed of a car traveling on a city street, and got a answer of 1100 miles per hour. Is that reasonable? Absolutely not! Make sure your answer seems reasonable.
2. Don't forget to solve **ALL** parts of the problem.
3. Make sure you check your answer by putting your answer back into the original equation.
4. Make notes on the problem. This may seem trivial, but it can be a big help when studying for a quiz or exam.

Notes: