Work through the following problems from the textbook.

For the following 6 problems, use [Polya's plan](https://ccs.instructure.com/courses/1268802/files/63773751/download?wrap=1) to identify the data, condition and unknown. Use your own words and provide as much detail as you would need if you were explaining this to someone else. You do not need to solve but you may if you want.

**Problem 1-2.1**

A computer-generated report includes inventory information for 200 items. The information for each item is given on a separate line. If 50 lines will fit on a page, how many pages of printer paper will it take to print the report?

**Problem 1-2.2**

A box contains 30 cookies. If each cookie weighs ½ ounce, what is the weight of the cookies?

**Problem 1-2.3**

A box contains 30 cookies. If the empty box weighs 2 ounces and each cookie weighs ½ ounce, what is the weight of the box full of cookies?

**Problem 1-2.4**

A box of cookies contained 30 cookies when purchased. The empty box weighs 2 ounces, and each cookie weighs ½ ounce. If one third of the cookies have been eaten, what is the combined weight of the box and the remaining cookies?

**Problem 1-2.9**

You are driving a bus on the Main Street line. At the start of the run down Main Street the bus is empty. At First Avenue three passengers get on. At Second Avenue two more passengers get on. At Fifth Avenue four passengers get on and two get off. At Seventh Avenue one passenger gets off and two get on. How old is the bus driver?

**Problem 1-2.12**

Four men want to cross a bridge at night so they can proceed on to the town on the other side. All begin on the side opposite the town. They need a flashlight to cross the bridge, and they have only one flashlight among them. Also, a maximum of only two men can cross the bridge at one time, and whoever crosses must share the flashlight. They can cross two at a time but someone must return the flashlight to the starting side so the next two can cross. Each man walks at a different speed and any pair crossing at the same time must walk at the slower man’s pace. Here are their walking rates:

Man #1 takes 1 minute to cross the bridge.

Man #2 takes 2 minute to cross the bridge.

Man #3 takes 5 minute to cross the bridge.

Man #4 takes 10 minute to cross the bridge.

For the problems below, create an IPO chart for each. You need only write what you need in the chart in order to fully explain how you arrived at the answer. Microsoft Word might be best to use to create an IPO table to type in. You may also use this IPO template.

You may work in your groups but each student must complete their own assignment.

**Problem 1-4.1**

How many 150-foot laps must you swim in a 75-foot pool in order to swim a mile?

**Problem 1-4.2**

A box contains 30 cookies. If each cookie weighs ½ ounce, what is the net weight of the box when it is full? Net weight is the weight of the contents and excludes the weight of the container.

**Problem 1-4.3**

A computer-generated report includes inventory information for 200 items. The information for each item is given on a separate line. Up to 50 lines will fit on a page. The pages are numbered. The first page is number 1. What is the final page number?

**Problem 1-4.6**

A box contains 30 cookies. If the empty box weighs 2 ounces and each cookie weighs ½ ounce, what is the total weight of the box full of cookies?