Exercise Objectives

The four main purposes of this exercise are to:
1. Demonstrate proper word problem setup
2. Introduce the Excel® spreadsheet software
3. Introduce Excel® navigation
4. Introduce Excel® cell formatting

Background

Nearly all word problems encountered in a technical field are solved by first analyzing the problem statement, then performing some intermediate steps, and finally determining the problem solution. Breaking technical problems down into these components not only helps you organize your thoughts during the analysis, but also presents an opportunity to generate a solution that is clear, concise, and adaptable to a number of similar problems.

There is an embedded feature in Excel® termed the “five column format” specifically designed for this purpose. This method of analysis can be applied in any technical setting and can make not only the analysis more clear, but also simplify the presentation of the analytical steps.

The Assignment

Using Excel® and the problem statement below, create a five column format solution to the below problem.

Find the cross sectional area of an 8" diameter water main pipe.

Hand In

A printed version of the spreadsheet solution on 8½" x 11" paper.

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