**Problem Set #3**

**EXCEL PROBLEMS**

Excel Resource #1: Excel textbook, p EX67-122.

Use Levitt.xlsx and Draft.png from Excel 2013 Data Files zip file to practice described operations.

Excel Resource #2: online search

Excel Resource #3: Refer to Mike’s Office YouTube Videos 2.1 and 2.2 for a step by step explanation for the Review Assignment

I have used **bold** to set apart actual words to be typed. Do not type in bold.

I have used ***bold italics*** to set apart Steps that have corrected instructions.

For other Steps, I have listed suggestions or clarifications.

1. Open the EGR120 PS#3 Data file and rename it **EGR120PS#3-lastnamefirstinitial**.

In the worksheet tab named Income Statement**, s**tart the Case 1 assignment on p EX125, following directions, except as noted below.

There are many details – plan a way to keep track!

***Step 1*** – omit, this is already set up

***Steps 12-13*** – omit

*Step 14* - Save the workbook. Continue to next problem.

Save and close the workbook and submit it on Bb under the PS #3 Assignment link.

**WRITTEN PROBLEMS**

Refer to Thinking Like An Engineer, Ch 7

Please provide good problem solutions. SOLVEM+ is not needed for these conversion-only problems.

Ch 7, p 182-187: 1, 2\*, 7, 9\*, 16

Hints and ***Extra Instructions***

#7-2Convert to engineering notation first, then scientific notation

***#7-9 Convert all measures to km/hr***, remember to answer the question

Answers – numerical ranges with units

#7-7 13,000-14,000 ft

#7-9 1 – 3 km/hr for all answers

#7-16 700,000-800,000 L/yr

Refer to Thinking Like an Engineer, Ch 5.

You may want to print this page for completion and submission.

1. Write the number of significant figures in each number. If you believe the answer is ambiguous, write the possibilities and the one that is most likely.

(a) 0.385 x 103

(b) 40 001

(c) 4.00 x 104

(d) 0.400 x 104

(e) 0.0000053

2. Round the following numbers to 3 significant figures.

(a) 356,309

(b) 0.05738949

(c) 0.05999999

(d) 730 999

1. Compute and give the final answer with correct number of digits/decimal places for EGR120.

For credit, show your work and note what limits the significant figures in each step. No credit will be given for a correct guess. Make sure you read the rules in the book, if necessary.

(a) (34.7 – 49.0456)/7

(b) (0.00034)(48,579) - 345.984

(c) (9.40)^2 + 3.40 (9.40) + 3.982

(d) 4.0568 x 10-3 – 0.492 x 10-2 \*\*\*

(e) 8.9245 x 104 / 6.832 x 10-5 \*\*\*

\*\*\* (treat these numbers as scientific notation, not multiplication)

1. A sandwich shop sells sandwiches which are advertised as being one foot long. It was recently (*scandalously*) discovered that the sandwiches are in fact only 11.5 inches long! What are the absolute, relative and percent errors of the advertised length?

**READING QUESTIONS**

Read Thinking Like an Engineer, Ch 8.1, 8.2, p 188-192

Is your weight the same, more or less on the moon than on earth?

Is your mass the same, more, or less on the moon than on earth?

**SUBMISSION**

Submit your written problems in class.

Submit your one Excel file on Bb by clicking on the PS#3 Assignment name.