

Essential Skills – Lesson 10

Today we continue our Math Overview and look at Operations on Numbers. It is kind of Python related but important that you understand what the operations do and return and results.

Read through the document Operations on Numbers. If there are any operations you are not seeing, go to google and search. Ie: Python ceil().

Try and determine the logic for each of the following:

- Write a program that defines variables X and Y and perform each operation – print the result – make a note to yourself about the purpose of each operator.
- **Challenge: **A bit tricky**** Write a program that requires the user input an item cost. Calculate the Retail cost by increasing the item cost using a markup of 75%. Round the result to 2 decimal positions and adjust the retail price to the next .95 – all products are recorded on the sales tags as .95.
- **Challenge: **Difficult**** Write a program for the total cost of a purchase and the amount of money provided by the customer for payment. Determine the change and how it is to be divided using \$20, \$10, \$5, \$2, \$1, .25, .10, .05 – for pennies, if the number of pennies is 3 or greater add 1 to the number of nickels. Display the number of each that is required for the proper change. HINT: Convert everything to cents.

See you at 10.