Activity: Python 1 ACT/Bonus—Tasks 2-4
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The electronic signatures above indicate that the activities submitted are the combined effort of all team members and that each member of the team was an equal participant in its creation. In addition, Each member of the team has a general understanding of all aspects of the program development and execution.

Python 1 ACT Task 2

- To get the following output:
  - The volume of a sphere is 904 [cm^3] …
- One should change the code so as to make volume an integer.
  - print ('The volume of a sphere is ', int(volume), '[cm^3] for a given')

- To get the following output:
  - The volume of a sphere is 905 [cm^3] …
- One should change the code so as to round volume up to the next integer.
  - print ('The volume of a sphere is ', math.ceil(volume), '[cm^3] for a given')

Python 1 ACT Task 3

Problem #	Hand Calculation	Python Calculation
1	10	10
2	100	100
3	96	96.0
4	17/3	5.3333333333333333
5	4096	4096
6	2	2.0
7	13	13

1) The Python answers sometimes had an extra “.0” added to the end of a whole number.
2) print()
3) Python only outputs decimals, whereas calculators convert answers to a fraction if possible. The “//” operation can be used in Python to make the output of division an integer, whereas calculators cannot do this. Python can perform modular division, denoted by the “%” symbol, but calculators can’t do this. Python uses “**” to denote exponentiation, whereas a calculator uses “^”.

Python 1 ACT Task 4

1) No error
2) Change B-2 to B_2
   - B-2 will be read as subtraction. B is not a valid identifier and the subtraction operation cannot occur on the left side of an equal sign.
3) No error
4) No error
5) Change class to another variable name
   - Class is a reserved name in python and cannot be used as an identifyer
6) No error
7) Change Count to CounT
   - Count has not been named as an identifier in this code yet. Case matters in the use of variable names.
8) No error
9) Change ^ to **
   - Python does not recognize ^ as a function
10) No error
11) No error
12) No error
13) Change ^ to **
    - Python does not recognize ^ as a function
14) No error
15) No Error