Quiz #1 for October 6, 2020

Please use your Python system (IDLE or something else) to compute the following. Be prepared to show your work!

1. If $x = 3$ and $y = 18$, what is $x^3 + \frac{y}{2} + \left\lfloor \frac{x+y}{6} \right\rfloor$?

   Answer: The Python expression is: `x**3 + y/2 + (x+y)//6`. This evaluates to `3**3 + 18/2 + (3 + 18) / 6 = 27 + 9.0 + 21 // 6 = 27 + 9 + 3 = 39`.

   Note the second division is integer division, which is the floor function.

2. What is the remainder of 2,347,500,001 when it is divided by 6,345?

   Answer: You never put commas in numbers in Python. So the Python expression to evaluate is `2347500001 % 6345`, which gives 2281.

3. True or false: The value of `2 + 3 % 2` is 1, because 2 + 3 is 5, and 5 % 2 is 1.

   Answer: False. The modulo or remainder operator (%) has higher precedence than the addition (+) operstor, so you do the `%` first. This gives ¡tt¿2 + 3 % 2 = 2 + 1 = 3¡/tt¿.