**Exercise 2.2**

(Objectives 2.6,2.7,2.8)

1. After the following statements, what are the values of x and y?

x = 15

y = x

x = 22

2.Practice using the Python interpreter as a calculator:

The volume of a sphere with radius*r*is*4/3 π r3*. What is the volume of a sphere with radius 5?

3. What are the results of the following expressions?

42 / 5

42 // 5

42 % 5

40 % 5

5 \*\* 2

4. In mathematics, the Nth harmonic number is defined to be 1 + 1/2 + 1/3 + 1/4 + ... + 1/N. So, the first harmonic number is 1, the second is 1.5, the third is 1.83333... and so on. Assume variable N has been created and assigned a value. Write an expression whose value is the 8th harmonic number.