**Level 1 : Easy 1 - 4**

**1-Determine the result of:**

* $15 + 35.6 + 20.78 - 0.01$
* $0.5 + (0.8 \cdot 0.5) - 0.333$
* $(0.5 + 0.8) \cdot (0.5 - 0.333)$
* $100 / (400 \cdot 4)$
* $100/ 400 \cdot 4$
* $2.0^5 + 100$
* $2.0^{(5 + 100)}$

**2-Copy the following definitions into Jupyter Notebook:**

**Using comparison operators, determine whether:**

* num1 is smaller than num3
* num2 is smaller than or equal to num6
* num3 is larger than num4
* num5 is larger than or equal to num6
* num5 and num1 are the same
* num2 and num4 are not the same

**3-In this exercise, you will be using functions defined in the math library. To use them in your**

**own code, you will first need to import the library with the following syntax:**

**Copy the following variable declarations into a Notebook**

* Calculate the square root of {{num1}}
* Calculate the square root of {{num4}}
* Calculate the absolute value of {{num5}}
* Calculate the absolute value of {{num3}}
* Determine whether the absolute values of {num1}and {num3} are the same
* Determine whether the square root of {num6} is larger than {num1}
* Determine whether the absolute value of {num5} is smaller than {num2}
* Determine the square root of the square root of {{num5}}

**4-Translate the mathematical notations used below into familiar Python command structures**

**and solve the equations**

* For $x = 5$ determine the result of $y = 6x^2+3x+2$
* For $x = 0.5$ determine the result of $y = \sqrt{\sqrt{\sqrt{x/3.6}}}$
* For $a = 3$, $b = 10$, and $c = -2$ determine the two possible results of $y\_{1/2} = \frac{-b \pm \sqrt{b^2-4ac}}{2a}$

**Level 2 : Medium 5 - 8**

5-Write a code that accepts a distance and converts it from:

* Kilometres to miles
* Miles to Kilometres.

6-Write a code that accepts a temperature and converts it from:

* Fahrenheit to Celsius
* Celsius to Fahrenheit.

7-Using compound operators, determine the results of

* num1 = num1 + 50
* num2 = num2 - 100
* num3 = num3 \* 1000
* num4 = num4 / 10
* num4 = num4 + num1

8-Write a code that asks the user to provide a time duration in seconds. Convert the time into

the following format: w days, x hours, y minutes, and z seconds and display the result.