

Arithmetic Operators

As in math, the order of operations applies (BEDMAS)

+	addition	()	brackets or parenthesis
-	subtraction		exponents
*	multiplication		
/	division		

What is implicit multiplication ?

Converting Mathematical Equations into Python expressions

Remember to choose **meaningful** variable names and the correct data types to store the information.

Create 6 Python programs to calculate the following equations:

- 1.a) Area of a circle $a = \pi r^2$
b) Circumference of a circle $C = 2 \pi r$
where $\pi = 3.14159$ and $r = 7$
- 2.a) Volume of a cube, where $v = \text{side}^3$
b) Surface area of a cube where $a = 6 \text{side}^2$
where $\text{side} = 6$
3. a) Surface area of a sphere, where $sa = 4 \pi r^2$
b) Volume of a sphere where $v = \frac{4}{3} \pi r^3$
where $\pi = 3.14159$ and $r = 22.7$
4. Fahrenheit = $\frac{9}{5}$ Celsius + 32, where Celsius = 10
5. Assign your height in metres to a variable called *height* and your mass to variable called *mass*. Calculate and output your mass per unit height ratio.
6. A company's profit can be calculated as follows :
Profit = sales – costs – expenses

Calculate and output the company's profit if sales are \$75000, costs are \$21000 and expenses are \$34000.