



# Assignment



1. Write a function in MATLAB, named **addition** that would calculate the sum  $s$  of two given values or numbers  $a$  and  $b$ .

Similarly, in case  $a$  and  $b$  vectors are it possible to sum them with the same program?

finally, in case  $a$  and  $b$  matrices are it possible to sum them with the same program?

2. Write a function in MATLAB, named **circle** that would calculate the area of circle and perimeter

3. Write a function in MATLAB, named **cylinder** that would calculate the area of cylinder and perimeter.

4. Write a function in MATLAB, named **rectanglemoment** that would calculate the moment of inertia of rectangle.

5. Write a function in MATLAB, named **circlemoment** that calculates the moment of inertia of circle

6. Write a function in MATLAB, named **trianglemoment** that would calculate the moment of inertia of triangle.

7. Write a function in MATLAB, named **trigonometric** that would calculate the cosine and sine and tangent of any given  $x$ . Where  $x \in [1 \ 10]$

8. Write a function in MATLAB, named **nonlinear** that would calculate  $f(x) = \frac{2x^3 + 7x^2 + 3x + 1}{x^2 - 3x + 5e^{-x}}$

the  $\cos x$ ,  $\sin x$  and  $\tan x$  of any given  $x$ . Where  $x \in [1 \ 10]$