

Plot the following in a plotter of your choice, with properly labelled axes:

(1) cubes of integers against the integers themselves. The x-axis should spread from -125 to 125. You may use either a datafile to draw the plot or write algebraic expressions in your plotter.

$$(2) f(x) = \cos(2x - \pi/4) + \sin(3x + \pi/2)$$

(3) **SEPARATE** three dimensional plots of $ff(x)$, $gg(x)$ and $hh(x)$, where:

$$\begin{aligned} ff(x) &= yy * (\sin(4(x + 2\pi))), \\ gg(x) &= ww * (\sin(2(x + 3\pi)) - \cos(2(x + 4\pi))), \\ hh(x) &= zz * (\sin(3(x + 5\pi)) - \cos(6(x + 2\pi))) \end{aligned}$$

If your roll number in the course work is BI/2010-11/**SOME_NUMBER** :

use $yy = \text{SOME_NUMBER} + 2$, $zz = \text{SOME_NUMBER} + 4$, $ww = \text{SOME_NUMBER} + 3$;

Rotate the plots in any direction that you wish and feel free to scale any axis by any factor (please mention the scaling factor in the plot), that you wish, for beautification.

Please mention in your e-mail which plotter you have used to draw the figures.

If you are using Gnuplot, please use ? in gnuplot terminal to know more.

Please send **ALL** your files together in a **SINGLE** e-mail.