## Worksheet \#14

(1) Sketch the points $(0,5,2),(4,0,-1)$, and $(1,-1,2)$ on a single set of coordinate axes.
(2) Find the equation of a sphere with center $(2,-6,4)$ and radius 5 . Describe its intersection with each of the coordinate planes.
(3) Show that $x^{2}+y^{2}+z^{2}+8 x-6 y+2 z+17=0$ represents a sphere. Find its center and radius.

