## Planes in 3D

1. Consider the he plane $P$ defined by $3 x-2 y+2 z=6$.
(a) Find where $P$ intersects the $x y$ plane.
(b) Sketch the graph of $P$.

2. Where does the line $x=y-1=2 z$ intersect the plane $3 x-2 y+2 z=6$ ?
3. Find the distance from the origin to the plane $3 x-2 y+2 z=6$.
4. Consider the planes $3 x-2 y+z=1$ and $2 x+y-3 z=3$
(a) Find the angle between the two planes.
(b) Find the line of intersection between the two planes.
