Checkpoint: Lines and planes

Consider these three planes:

- p_1 is given by the scalar equation $-2x+y-3z=4$
- p_2 is the plane through the points $(0,-1,0)$, $(1,1,0)$, and $(0,2,1)$
- p_3 has a normal vector $\mathbf{n}=\langle 1,2,1\rangle$ and passes through the point $(4,-2,1)$

(a) Two of these planes are parallel and therefore do not intersect. Which ones?
(Hint: look at the normal vectors.)

(b) For two of the planes that *do* intersect, write an equation for the line of intersection.