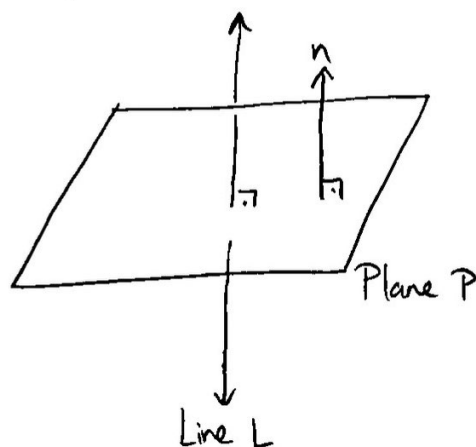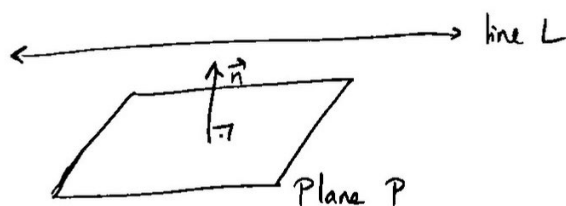① If a line L is perpendicular to a plane P, then we have a picture that looks like the following:

As you can see from the picture, in this case the direction vector of the line L is parallel to the normal vector of the plane.

② On the other hand, if a line L is parallel to a plane P, then we have a picture that looks like this:

As you can see from the picture, in this case the direction vector of the line L is perpendicular to the normal vector of the plane P