

Projection of a line on a plane.

If P be the point of intersection of given line and plane and Q be the foot of the perpendicular from any point on the line to the plane then PQ is called the projection of given line on the given plane.

Image of line about a plane: Let line is $\frac{x-x_1}{a_1} = \frac{y-y_1}{b_1} = \frac{z-z_1}{c_1}$, plane is $a_2x + b_2y + c_2z + d = 0$

Find point of intersection (say P) of line and plane. Find image (say Q) of point (x_1, y_1, z_1) about the plane. Line PQ is the reflected line.