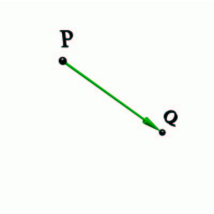
DISTANCE POINT-POINT (3D). If P and Q are two points, then

$$d(P,Q) = |P - Q|$$

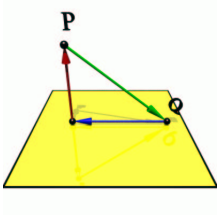
is the distance between P and Q.



DISTANCE POINT-PLANE (3D). If P is a point in space and $n \cdot x = d$ is a plane containing a point Q, then

$$d(P,L) = |(P - Q) \cdot n|/|n|$$

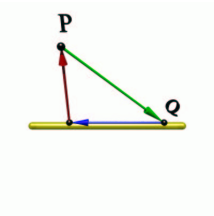
is the distance between P and the plane.



DISTANCE POINT-LINE (3D). If P is a point in space and L is the line $r(t) = Q + tu$, then

$$d(P,L) = |(P - Q) \times u|/|u|$$

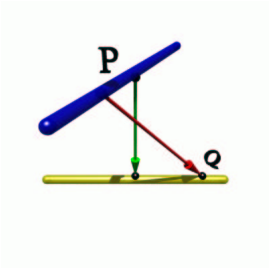
is the distance between P and the line L.



DISTANCE LINE-LINE (3D). L is the line $r(t) = Q + tu$ and M is the line $s(t) = P + tv$, then

$$d(L,M) = |(P - Q) \cdot (u \times v)|/|u \times v|$$

is the distance between the two lines L and M.



DISTANCE PLANE-PLANE (3D). If $n \cdot x = d$ and $n \cdot x = e$ are two parallel planes, then their distance is $(e - d)/|n|$. Nonparallel planes have distance 0.