Week 7 supplementary.
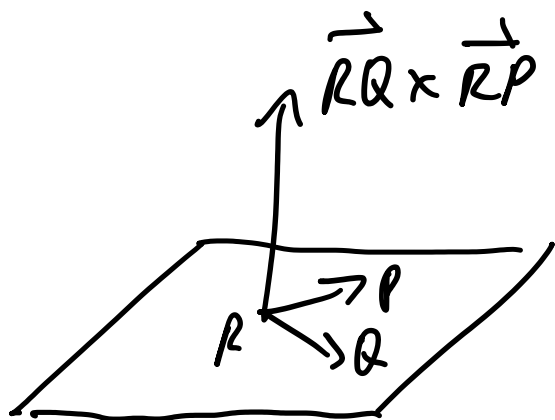
Ex $P(1,2,3)$ $Q(-2,4,1)$ $R(0,6,-2)$

$\vec{RQ} = (-2-0,\ 4-6,\ 1-(-2)) = (-2,-2,3)$

$\vec{RP} = (1-0,\ 2-6,\ 3-(-2)) = (1,-4,5)$

$\vec{RQ} \times \vec{RP} = \langle 2,\ 13, 10 \rangle$

$R(0,6,-2)$
$$2x + 13(y-6) + 10(z+2) = 0$$

$P(1,2,3)$
$$2(x-1) + 13(y-2) + 10(z-3) = 0$$

$Q(-2,4,1)$
$$2(x+2) + 13(y-4) + 10(z-1) = 0$$

Ex $r = \cos(3\theta)$