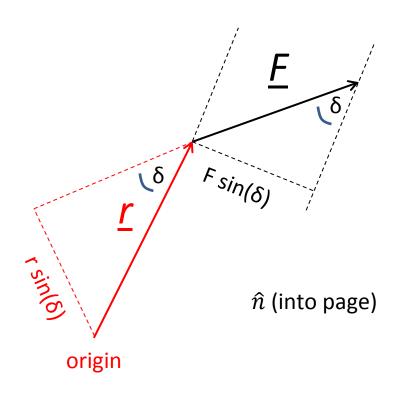
Torque (or moment) of a force

Consider a force **F** acting through a point at **r** from the origin



Torque,
$$\vec{T} = \vec{r} \times \vec{F} = rFsin(\delta)\hat{n}$$

RH screw rule tells us the direction of travel (clockwise here)
Also explains why commonly used as:

(Force) x (perpendicular distance from pivot)

Or

(Perpendicular component of force)x (distance from pivot)