2) $p=(2,-2,1)$ $q=(2,3,2)$

$p+q=(4,1,3)$ $p-q=(0,-5,-1)$

$|p|=\sqrt{2^2+(-2)^2+1^2}=\sqrt{9}$ $|q|=\sqrt{2^2+3^2+2^2}=\sqrt{17}$

$|p+q|=\sqrt{4^2+1^2+3^2}=\sqrt{26}$ $|p-q|=\sqrt{0^2+(-5)^2+(-1)^2}=\sqrt{26}$

$|p+q|^2=|p|^2+|q|^2$ $|p-q|^2=|p|^2+|q|^2$

$\sqrt{26}^2=\sqrt{9}^2+\sqrt{17}^2$ $\sqrt{26}^2=\sqrt{9}^2+\sqrt{17}^2$

PERPENDICULAR