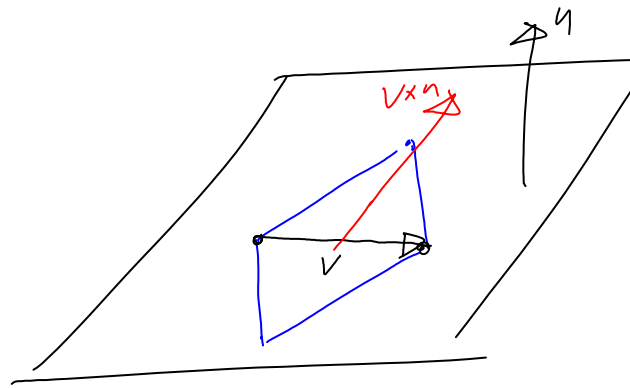


Principskiss:



Fins två möjligheter.

$$v = (1, 2, 0) - (1, 1, 1) = (0, 1, -1)$$

Normal till planet: $n = (1, 1, 1)$.

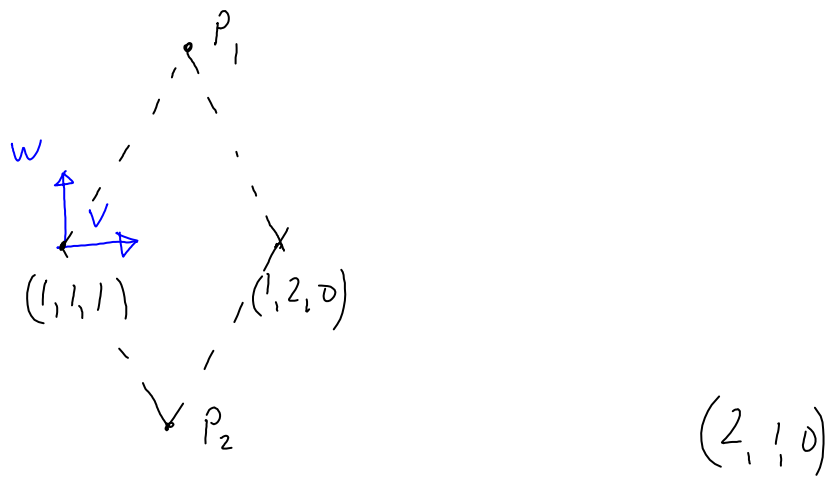
Riktning ^w vinkel rät mot v och n :

$$v \times n = (0, 1, -1) \times (1, 1, 1) = (2, -1, -1)$$

Vi normerar denna:

$$\hat{w} = \frac{1}{\sqrt{6}} (2, -1, -1)$$

Skiss i planet $x + y + z = 3$



Vi ser att

$$P_1 = (1, 1, 1) + \frac{1}{2} v + \frac{\sqrt{3}}{2} \cdot |v| \cdot w =$$

$$= (1, 1, 1) + \frac{1}{2} (0, 1, -1) + \frac{\sqrt{3}}{2} \cdot \sqrt{2} \cdot \frac{1}{\sqrt{6}} (2, -1, -1)$$

$$= (1, 1, 1) + \left(0, \frac{1}{2}, -\frac{1}{2}\right) + \left(1, -\frac{1}{2}, -\frac{1}{2}\right)$$

$$= \underline{(2, 1, 0)}$$

På samma sätt $P_2 = (1, 1, 1) + \frac{1}{2} v - \frac{\sqrt{3}}{2} |v| \cdot w =$

$$= (0, 2, 1)$$