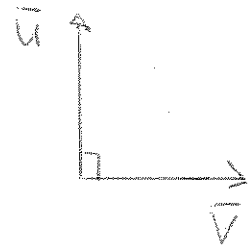


⑦

PM1

EX.1. $\vec{u} \cdot \vec{v} = 0$



$$\Rightarrow \langle 2, 1, 1 \rangle \cdot \langle a, 1+a, 1-a \rangle = 0$$

$$\Rightarrow 2a + 1(1+a) + 1(1-a) = 0$$

$$2a + 2 = 0$$

$$\underline{\underline{a = -1}}$$

längden: $|\vec{u} + 2\vec{v}| = |\langle 2, 1, 1 \rangle + 2\langle -1, 0, 2 \rangle|$

$$= |\langle 0, 1, 5 \rangle| =$$

$$= \sqrt{0^2 + 1^2 + 5^2} = \sqrt{26}$$