

Assegnati i seguenti vettori \mathbf{u} , $\mathbf{v} \in \mathbf{R}^3$, calcolare il modulo di \mathbf{u} , il versore di \mathbf{u} , il vettore $\mathbf{u}+3\mathbf{v}$, il prodotto scalare $\mathbf{u} \cdot \mathbf{v}$ e l'angolo $\widehat{\mathbf{u}\mathbf{v}}$:

$$\mathbf{u}=(8, -2, 2) \quad \mathbf{v}=\left(\frac{1}{2}, \frac{3}{2}, -\frac{1}{2}\right)$$

$$\mathbf{u}=(1, 1, -\frac{1}{2}) \quad \mathbf{v}=(2, 8, 2)$$

$$\mathbf{u}=(6, 6, -3) \quad \mathbf{v}=\left(\frac{1}{3}, \frac{4}{3}, \frac{1}{3}\right)$$

$$\mathbf{u}=\left(5, 5, -\frac{5}{2}\right) \quad \mathbf{v}=\left(\frac{2}{5}, \frac{8}{5}, \frac{2}{5}\right)$$

$$\mathbf{u}=(-4, -4, 2) \quad \mathbf{v}=(1, 4, 1)$$

$$\mathbf{u}=(2, 0, 2) \quad \mathbf{v}=\left(1, 1, \frac{1}{2}\right)$$

$$\mathbf{u}=\left(\frac{2}{3}, 0, \frac{2}{3}\right) \quad \mathbf{v}=\left(3, 3, \frac{3}{2}\right)$$

$$\mathbf{u}=\left(\frac{3}{2}, 0, \frac{3}{2}\right) \quad \mathbf{v}=\left(\frac{4}{3}, \frac{4}{3}, \frac{2}{3}\right)$$

$$\mathbf{u}=\left(\frac{1}{2}, 0, \frac{1}{2}\right) \quad \mathbf{v}=(-4, -4, -2)$$

$$\mathbf{u}=(3, 0, 3) \quad \mathbf{v}=\left(-\frac{2}{3}, -\frac{2}{3}, -\frac{1}{3}\right)$$

$$\mathbf{u}=(4, 0, 4) \quad \mathbf{v}=\left(-\frac{1}{2}, -\frac{1}{2}, -\frac{1}{4}\right)$$

$$\mathbf{u}=(0, -3, 1) \quad \mathbf{v}=(-2, -1, -3)$$

$$\mathbf{u}=(1, -3, 0) \quad \mathbf{v}=(-3, -1, -2)$$

$$\mathbf{u}=(2, -3, -1) \quad \mathbf{v}=(-2, 3, 1)$$

$$\mathbf{u}=(2, 2, -1) \quad \mathbf{v}=(2, 8, 2)$$

$$\mathbf{u}=(2, 8, 2) \quad \mathbf{v}=(1, -2, -2)$$

$$\mathbf{u}=(-1, 0, -\sqrt{3}) \quad \mathbf{v}=(\sqrt{3}, 0, 1)$$

$$\mathbf{u}=\left(-\frac{1}{2}, 0, -\frac{\sqrt{3}}{2}\right) \quad \mathbf{v}=(2\sqrt{3}, 0, 2)$$