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Opgave 448

$$\vec{a} = \begin{pmatrix} 4 \\ 2 \end{pmatrix}$$

$$\vec{b} = \begin{pmatrix} 3 \\ 2 \end{pmatrix}$$

$$\theta = \cos^{-1} \left(\frac{4 \cdot 3 + 2 \cdot 2}{\sqrt{4^2 + 2^2} \cdot \sqrt{3^2 + 2^2}} \right)$$

$$\theta = \cos^{-1} \left(\frac{16}{16.12452} \right)$$

$$\theta = 7,125144$$

$$\vec{a} = \begin{pmatrix} -1 \\ 3 \end{pmatrix}$$

$$\vec{b} = \begin{pmatrix} -2 \\ 5 \end{pmatrix}$$

$$\theta = \cos^{-1} \left(\frac{(-1) \cdot (-2) + 3 \cdot 5}{\sqrt{(-1)^2 + 3^2} \cdot \sqrt{(-2)^2 + 5^2}} \right)$$

$$\theta = \cos^{-1} \left(\frac{17}{17.02939} \right)$$

$$\theta = 3,366669$$

$$\vec{a} = \begin{pmatrix} 0 \\ 2 \end{pmatrix}$$

$$\vec{b} = \begin{pmatrix} 6 \\ 3 \end{pmatrix}$$

$$\theta = \cos^{-1} \left(\frac{0 \cdot 6 + 2 \cdot 3}{\sqrt{0^2 + 2^2} \cdot \sqrt{6^2 + 3^2}} \right)$$

$$\theta = \cos^{-1} \left(\frac{6}{13,41641} \right)$$

$$\theta = 63,43495$$