

2.19 Laske lausekkeen likiarvo kolmen desimaalin tarkkuudella.

a) $\sin(2\cos 70^\circ)$

b) $\cos(\sin 23 \cdot \cos 44^\circ)$

2.20 Laske lausekkeen

~~CAS~~

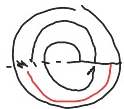
$$\left(\cos\frac{3\pi}{4} + \sin\frac{\pi}{4}\right)^2 + \frac{\sin 3\pi}{3} + 3\cos(-\pi) =$$

tarkka arvo ilman laskinta.

$$\cos\frac{3\pi}{4} = -\frac{1}{\sqrt{2}}$$

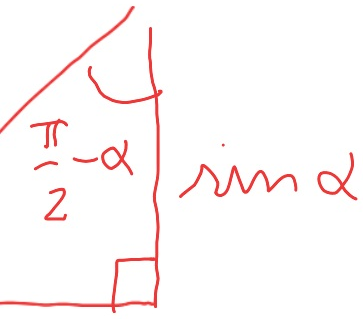
$$\sin\frac{\pi}{4} = \frac{1}{\sqrt{2}}$$

$$\sin 3\pi = \sin \pi = 0$$



$$\left. \begin{array}{l} \cos(-\pi) \\ \cos \pi \end{array} \right\} = -1$$

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



$$\sin\left(\frac{\pi}{2} - \alpha\right) = \frac{\cos \alpha}{1} = \cos \alpha$$

$$\cos\left(\frac{\pi}{2} - \alpha\right) = \frac{\sin \alpha}{1} = \sin \alpha$$

$$\sin(-\alpha) = -\sin \alpha$$

$$\cos(-\alpha) = \cos \alpha$$

$$\sin(\pi - \alpha) = \sin \alpha$$

$$\cos(\pi - \alpha) = -\cos \alpha$$

