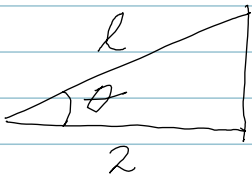


3.5=11 Evaluer $\cos(\tan^{-1} 1/2)$

Lösning: Definitionen av $\tan^{-1} 1/2 =$

$$\theta = \tan^{-1} 1/2 \Leftrightarrow \frac{1}{2} = \tan \theta \text{ og } -\frac{\pi}{2} < \theta < \frac{\pi}{2}$$

Tegner figur:



$$\tan \theta = \frac{1}{2} \Leftrightarrow \theta = \tan^{-1} 1/2$$

$$\cos \theta = \frac{2}{l}$$

$$l = \sqrt{2^2 + 1} = \sqrt{5}$$

$$\cos \theta = \cos(\tan^{-1} 1/2) = \frac{2}{\sqrt{5}}$$