$y = \sqrt{\cos x}$

$y = \sqrt{u}$ und $u = \cos x$

$y' = \dfrac{1}{2\sqrt{u}}$ $\qquad$ $u' = -\sin x$

$y' = \dfrac{1}{2\sqrt{u}} \bullet (-\sin x)$

$\quad = \dfrac{1}{2\sqrt{\cos x}} \cdot (-\sin x)$

$\quad = \dfrac{-\sin x}{2\sqrt{\cos x}}$