

# Derivative of the Square Root Function

Session 15

a)  $f^{-1}(u) = y \Rightarrow f(f^{-1}(u)) = f(y) \Rightarrow u = y^2 \Rightarrow 1 = 2y y' \Rightarrow y' = \frac{1}{2y} \Rightarrow y' = \frac{1}{2\sqrt{u}}$

b)  $f^{-1}(u) = \sqrt{u} \Rightarrow (\sqrt{u})' = \frac{1}{2\sqrt{u}}$