



Examples 6.4 – Inverse Trigonometric Functions

1. Compute the following derivatives.

Solution: (a) $\frac{d}{dx} \left(\sin^{-1}(x^2) \right) =$

(b) $\frac{d}{dx} \left(\ln \left(\tan^{-1} \left(\frac{1}{x} \right) \right) \right) =$

2. Compute the following integrals.

(a) $\int \frac{-1}{\sqrt{1-(2x+1)^2}} dx$

(b) $\int \frac{5}{2+x^2} dx$

Solution: (a)

(b)