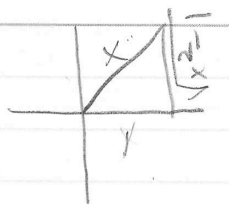


34. $\arccos x = \arcsin x$

$x = \cos(\arcsin x)$

$x = \frac{1}{x}$



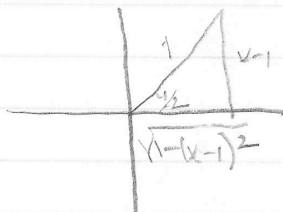
41. $f(x) = 2 \arcsin(x-1)$

$\sin y = x-1$

$\cos \frac{1}{2}y \cdot \frac{1}{2} \frac{dy}{dx} = 1$

$\cos \frac{1}{2}y \frac{dy}{dx} = 2$

$\frac{1}{2} \frac{dy}{dx} = \frac{2}{\cos \frac{1}{2}y}$
 $= \frac{2}{\sqrt{1-(x-1)^2}}$



42. $f(x) = \arcsin t + 2$

$f'(x) = \frac{2t}{\sqrt{1-t^4}}$

43. $g(x) = 3 \arccos \frac{x}{2}$

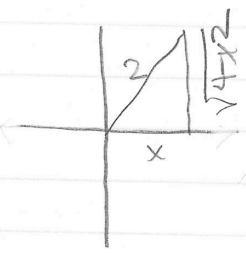
$= -3 \cdot \frac{1}{2}$
 $\frac{1}{\sqrt{1-x^2/4}}$

$= \frac{-3}{2 \sqrt{\frac{4-x^2}{4}}}$

$= \frac{-3}{2 \sqrt{4-x^2}}$ $\left\{ \begin{array}{l} \frac{dy}{dx} - \sin y \cdot \frac{1}{3} = \frac{1}{2} \\ \frac{dy}{dx} - \sin y \cdot \frac{1}{3} = \frac{3}{2} \\ \sin y \cdot \frac{dy}{dx} = \frac{-3}{2} \end{array} \right.$

$= \frac{-3}{\sqrt{4-x^2}}$

$\frac{dy}{dx} = \frac{-3}{2 \sqrt{4-x^2}}$



$\cos y = \frac{x}{2}$

