

Math 180
Spring 2010

Name _____

Homework #2
Due Thursday, March 4
No late papers accepted! No excuses!

1. Evaluate the expression.

a) $\sin\left(\arctan\left(\frac{x}{\sqrt{x^2+1}}\right)\right)$

b) $\cos\left(\arcsin\frac{x}{5}\right)$

2. Let $f(x) = \sqrt{x}$ and $g(x) = \sqrt{1-x}$. Find $f \circ g$ and $g \circ f$ and their respective domains.

3. Find all values of the slope of the line $y = mx + 2$ for which the x-intercept exceeds $\frac{1}{2}$.