

**Practice Problems 5 - Math 141, Frank Thorne (thornef@mailbox.sc.edu)**

**Any of these problems that might appear on a quiz, assessment, or the final exam.** You will be expected to show your work, write in complete sentences, and explain your reasoning clearly.

- (a) Thomas, 3.7, 9-45.
- (b) Thomas, 3.8, 11-96.
- (c) Sketch graphs of the six inverse trigonometric functions  $\sin^{-1}(x)$ ,  $\cos^{-1}(x)$ ,  $\tan^{-1}(x)$ ,  $\cot^{-1}(x)$ ,  $\sec^{-1}(x)$ , and  $\csc^{-1}(x)$ . State their domains and ranges, and compute their derivatives.
- (d) Thomas, 3.9, 1-8, 21-34.