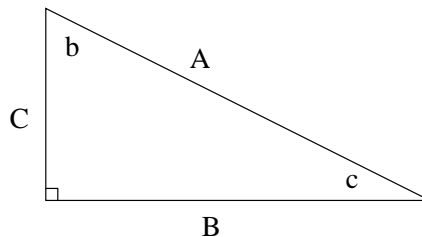


Math 026L.04 Spring 2002  
Assignment #2

This assignment is due at the beginning of class on Friday, January 25, 2002. You must work through all problems on your own. You may consult any reference materials, and seek help in the Help Room, but do not discuss these problems with anyone else in the class. Show all work neatly and in order, and clearly indicate your final answers. Answers must be justified whenever possible in order to earn full credit.

1. Section 3.5 Page 132 # 53(c)
2. Section 3.6 Page 138 # 54
3. Coursepack Page 70 # 4(a), (b), (c), (d); # 5
4. Find the exact values of the following.
  - (a)  $\tan(\cos^{-1} 0.5)$
  - (b)  $\sin(\tan^{-1} x)$
5. Compute  $\frac{d}{dx} \cos^{-1} x$  by mimicking the computation of  $\frac{d}{dx} \sin^{-1} x$  as done in class.
6. Consider the right triangle with sides  $A$ ,  $B$ , and  $C$  shown below.



If angle  $c = 25^\circ$  and side  $B = 3$ , solve the triangle by finding angle  $b$  and sides  $A$  and  $C$ .