## ✤ Formula Sheet Allowed. 4-FUNCTION CALCULATOR ONLY. [REMEMBER: IT WILL BE "NO CALCULATOR OR FORMULA SHEET" IN CALCULUS.]

You must show the use of the correct formula to receive credit for the problem. Simplify fractions and reduce radicals as we have done in class. [Roots within roots are acceptable answers.]

Answers having no supporting arithmetic work will not be scored.

1. Use the information about the angle,  $\theta$ , to find the <u>exact value</u>. [5 pts]



2. Use a half-angle formula to find the exact value of sec 15°. [10 pts]

Work:

sec 15° = \_\_\_\_\_

3. Use a half-angle formula to find the exact value. [5 pts]



Find the exact value of the expression. [15 pts]



Find the exact value of the expression. [15 pts]

5.  $\sin^2\left(\frac{1}{2}\tan^{-1}(-3)\right)$ Work: