**Math 280: 7.2 Trignometric Integrals**

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| *Some Basic Identities* |
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**Vanden Eynden**

**Strategies for integrating expressions involving:**

**Powers of sin*x* and/or cos*x***

* If, and *m* and/or *n* is ODD
* Strip off a sin*x* dx or cos*x* dx
* Use  to get rest of expression in terms of all sin*x* or all cos*x*
* Use a u-substitution (use u = sin*x* if n odd, u = cos*x* if m odd)
* or if both have EVEN powers, uses a half angle formula

**Powers of tan*x* and/or sec*x,*** 

* If the power of secant is EVEN
* Strip off a factor of 
* Use  to get the rest of the expression in terms of tan*x*
* Use a u-substitution, u = tan*x*
* If the power of tangent is ODD
* Strip off a factor of 
* Use  to get the rest of the expression in terms of sec*x*
* Use a u-substitution, u = sec*x*

**Established Integration Formulas**

 

 

**Integrals involving: **

* Use Product Formulas





