

TRIGONOMETRIC INTEGRALS

Very Important Identities Needed (Fill in the following)

1. $\sin(2x) =$

2. $\sin^2(x) =$

3. $\cos^2(x) =$

4. $\tan^2(x) =$

Strategy for Evaluating $\int \sin^m(x) \cos^n(x) dx$ (Try and state in your own words)

Strategy for Evaluating $\int \tan^m(x) \sec^n(x) dx$ (Try and state in your own words)

Fill in the following:

1. $\int \tan(x) dx =$

2. $\int \sec(x) dx =$

Work the following problems before class

1. $\int \tan(x) \sec^3(x) dx$

2. $\int \sin^3(x) \cos^4(x) dx$

3. $\int \sin^2(x) \cos^2(x) dx$