

Math 14  
Winter 2009  
Topics for Quiz on Friday 1/23

Not *all* these topics will be on the quiz, but any of them might be.

**Definitions:**

1. Limit.
2. Linear and affine.
3. Differentiable.
4. Tangent.
5. Open set.

**Statements of Theorems:**

1. Chain rule.
2. Criterion for differentiability using partial derivatives.
3. Inverse function theorem.

**Basic Calculations:**

1. Matrix multiplication.
2. Determinants.
3. Derivatives.
4. Tangent approximations.
5. Partial derivatives using chain rule.
6. Partial derivatives of implicitly defined functions.