Calculus II - Fall 2014 - Mr. Clontz - Quiz 06
Fill in the circle for the correct answer for each of the following problems.

Name: _____ 9am / 10am

1. (10 points) Evaluate $\int x\cos(x)\,dx$.
   - ◯ $x\sin(x)+\cos(x)+C$
   - ◯ $x\cos(x)-\cos(x)+C$
   - ◯ $x^2\cos(x)+\sin(x)+C$
   - ◯ $x^2\sin(x)+x\sin(x)+C$
   - ◯ None of these.

2. (10 points) Evaluate $\int \sin^3(\theta)\cos^3(\theta)\,d\theta$.
   - ◯ $\frac{\sin^3(\theta)}{3}-\frac{\sin^5(\theta)}{5}+C$
   - ◯ $\frac{\cos^5(\theta)}{5}-\frac{\cos^3(\theta)}{3}+C$
   - ◯ $\frac{\sin^4(\theta)}{4}-\frac{\sin^6(\theta)}{6}+C$
   - ◯ $\frac{\cos^6(\theta)}{6}-\frac{\cos^4(\theta)}{4}+C$
   - ◯ None of these.

3. (10 points) Evaluate $\int \tan^6(x)\sec^4(x)\,dx$.
   - ◯ $\frac{\sec^7(x)}{7}-\frac{\sec^9(x)}{9}+C$
   - ◯ $\frac{\sec^9(x)}{9}+\frac{\sec^7(x)}{7}+C$
   - ◯ $\frac{\tan^7(x)}{7}-\frac{\tan^9(x)}{9}+C$
   - ◯ $\frac{\tan^9(x)}{9}+\frac{\tan^7(x)}{7}+C$
   - ◯ None of these