Basic Trig.

- Your answers should be an angle in **RADIANS**.
  - $\arccos(\frac{1}{2}) =$ _____
  - $\arccos(-\frac{1}{2}) =$ _____
  - $\arcsin(\frac{1}{2}) =$ _____
  - $\arcsin(-\frac{1}{2}) =$ _____
  - Can you do similar problems?

Calculus I Integration Basics

In this part, a is a constant and $a > 0$.

- If $u \neq 0$, then $\int \frac{du}{u} =$ _____ + C
- If $a \neq 1$, then $\int a^u \, du =$ _____+ C
- $\int \cos u \, du \; =$ _____ $+ C$
- $\int \sec^2 u \, du \; =$ _____ $+ C$
- $\int \sec u \tan u \, du \; =$ _____ $+ C$
- $\int \sin u \, du \; =$ _____ $+ C$
- $\int \csc^2 u \, du \; =$ _____ $+ C$
- $\int \csc u \cot u \, du \; =$ _____ $+ C$
- $\int \tan u \, du \; =$ _____ $+ C$
- $\int \cot u \, du \; =$ _____ $+ C$
- $\int \sec u \, du \; =$ _____ $+ C$
- $\int \csc u \, du \; =$ _____ $+ C$
- $\int \frac{1}{\sqrt{a^2-u^2}} \, du \; =$ _____ $+ C$
- $\int \frac{1}{a^2+u^2} \, du \; =$ _____ $+ C$
- $\int \frac{1}{u\sqrt{u^2-a^2}} \, du \; =$ _____ $+ C$

To do well on our Math 142 Exam 1, you will need to know basic trigonometry and the basic Math 141 integration formulas. I highly suggest you take a look at some Problem 0's from Exam 1 from my previous exams posted on the course homepage.

On your Math 142 Exam 1, if you do not make at least half of the points on Problem 0 (which will contain questions as on this quiz), then your score for the entire exam will be whatever you made on Problem 0. There really is no need to look further through your exam.