

## Homework 2

Sections 7.3 & 7.4

Due: 2-4-14

1. Determine

$$\int \frac{\cos(x)}{\sin^2(x) - \sin(x) - 2} dx.$$

2. Use completing the square to determine the following integral

$$\int \sqrt{-2x^2 + 16x - 23} dx.$$

*Hint:* Use  $u$ -substitution followed by a trigonometric substitution *after* you complete the square.