## Example Homework Assignment

## Course XYZ

Due: September 1, 2020

## Problem 1. Rodriguez' Formula

Answer the following questions:

- (a) Using Rodriguez' rotation formula, write down an expression for  $e^{\hat{\omega}}$  where  $\omega$  is a given vector in  $\mathbb{R}^3$ .
- (b) Write down an expression for a rotation matrix implementing a rotation by  $\theta$  radians counterclockwise about an axis in the direction of  $\omega \in \mathbb{R}^3$ .