Student ID:

Student Name:

Serial Number:

Math 201, Section 12
Fall 2016, Term 161

Quiz 2
Version A

Instructions: Show Your Work!

1. (3 pts) Find the length of the polar curve $r = 1 - \cos\theta$, $0 \leq \theta \leq 2\pi$.

2. (3 pts) Find the equation of the sphere with center $(2, -3, 6)$ that touches the $yz-$plane.

3. (4 pts) If $\vec{v}$ lies in the first quadrant and makes an angle $\frac{\pi}{6}$ with the positive $x-$axis and $|\vec{v}| = 2$, find $\vec{v}$ in component form.

Student ID:

Student Name:

Serial Number:

Math 201, Section 15
Fall 2016, Term 161

Quiz 2
Version B

Instructions: Show Your Work!

1. (3 pts) Find the area inside the circle $r = 6$ and above $r = 3\csc\theta$.

2. (3 pts) Find an equation of a sphere if one of its diameters has $(4, -3, 6)$ as one end-point and the other end touches the $yz-$plane.

3. (4 pts) If $\vec{v}$ lies in the first quadrant and makes an angle $\frac{\pi}{3}$ with the positive $x-$axis and $|\vec{v}| = 4$, find $\vec{v}$ in component form.