Math 201	Quiz 2(a)	Time: 20 minutes			Date: 22-02-2018
Name	ID		Sr.#	Sec. 06	Marks (6):-

Q1. Let R be the region that lies inside $r = 1 + \sin\theta$ and outside $r = 1$. Sketch R and find its area.

Q2. Find the distance between the midpoint of the line segment through the two points $A(1, 2, -3)$ and $B(3, -4, 1)$ and the x-axis.

Math 201	Quiz 2(b)	Time: 20 minutes			Date: 22-02-2018
Name	ID		Sr.#	Sec. 06	Marks(6):-

Q1. Let R be the region that lies inside $r = 3(1 - \cos\theta)$ and outside $r = 3$. Sketch R and find its area.

Q 2. Find the distance between the point $A(1, 2, -3)$ and the sphere that passes through the point $(4, 3, -1)$ and has center $(3, 8, 1)$.

Math 201	Quiz 2(c)	Time: 20 minutes		Date: 20-02-2018
Name	ID	Sr.#	Sec. 08	Marks (6):

Q1. Sketch the polar curve $r = 1 - \cos\theta$ and find its length.

Q2. Find a vector of length 3 in the direction of the vector $\vec{a} + \vec{b}$ where $\vec{a} = \langle 2,0,-2 \rangle$ and $\vec{b} = \langle 0,4,0 \rangle$.

Name	ID		Sr.#	Sec. 08	Marks(6):

Q1. Let R be the region that lies inside $r = 1 - \cos\theta$ and outside $r = 1$. Sketch R and find its area.

Q2. Let $\vec{v}$ be a vector of magnitude 2 and makes an angle $\frac{3\pi}{2}$ with positive x-axis. Find its component form.