ID#_____ Name: Quiz 2 MATH 102-T173 Serial#_____

Q1. A **Region** is bounded by the graphs of $y = x^2$, $y = \frac{x^2}{4}$, $x \geq 0$ and $y = 1$. (a) **Sketch** the **Region.**

(b) Only set up the Integral that gives **Area of the Region.**
(**Do not solve integral**)

Q2. A **Region** bounded by the graphs of $y = x - 1$, $y = 2$, x-axis and y-axis is **revolved** about the **line $x = -1$**.

(a) **Sketch** the **Region** and **line of Revolution.**

(b) Only set up Integral that gives volume of **resulting solid.**
(**Do not solve integral**)

Q3. The **base of a solid** is a region bounded by the graphs of $y = x$, $y = 2x - 3$ and y-axis . The **cross sections of the solid** perpendicular to the ***x*-axis** are **Semicircles** with diameter on the base.

(a) Sketch the **cross section**

(b) Sketch the **Region** for the **base**

(b) Only set up Integral that gives volume of **resulting solid**
(**Do not solve integral**)

ID#_____ Name: Quiz 2 MATH 102-T173 Serial#_____

Q1. A **Region** is bounded by the graphs of $y = |x|$ and $y = \frac{-x}{2}$.

(a) **Sketch** the **Region.**

(b) Only set up the Integral that gives Area of the Region.
(**Do not solve integral**)

Q2. A **Region** bounded by the graphs of $y = 2 - x^2, y = x^2$ is **revolved** about the ***x* - axis**.

(a) **Sketch** the **Region** and **line of Revolution.**

(b) Only set up Integral that gives volume of **resulting solid**
(**Do not solve integral**)

Q3. The **base of a solid** is a region bounded by the graphs of $y = \ln x, y = 0, y = e$ and y-axis. The **cross sections of the solid** perpendicular to the ***y*-axis** are **Rectangles** of **height** 3 with one side on the base.

(a) Sketch the **cross section**

(b) Sketch the **Region** for the **base**

(b) Only set up Integral that gives volume of **resulting solid**
(**Do not solve integral**)

ID#_____ Name: Quiz 2 MATH 102-T173 Serial#_____

Q1. A **Region** is bounded by the graphs of $x = 2 - y^2$ and $x = -y$.

(a) **Sketch** the **Region.**

(b) Only set up the Integral that gives Area of the Region.
(**Do not solve integral**)

Q2. A **Region** bounded by the graphs of $x = e^y$, $y = 0$, $y = 1$ and y-axis is **revolved** about the **line x = 3.**

(a) Sketch the **Region** and **line of Revolution.**

(b) Only set up Integral that gives volume of **resulting solid**
(**Do not solve integral**)

Q3. The **base of a solid** is a region bounded by the graphs of $y = \cos x, x \in [-\pi, \pi]$ and y-axis. The **cross sections of the solid** perpendicular to the ***x*-axis** are **Equilateral Triangles** with one side on the base.

(a) Sketch the **cross section**

(b) Sketch the **Region** for the **base**

(b) Only set up Integral that gives volume of **resulting solid**
(**Do not solve integral**)

ID#_____ Name: Quiz 2 MATH 102-T173 Serial#_____

Q1. A **Region** is bounded by the graphs of $x = |y| - 1$ and $x = 1 - y^2$.

(a) Sketch the **Region.**

(b) Only set up the Integral that gives Area of the Region.
(**Do not solve integral**)

Q2. A **Region** bounded by the graphs of $y = \sin x,\ y = 2, x \in [0, \pi]$ is **revolved** about the **line *y* = 4**.

(a) Sketch the **Region** and **line of Revolution.**

(b) Only set up Integral that gives volume of **resulting solid.**
(**Do not solve integral**)

Q3. The **base of a solid** is a region bounded by the graphs of $x = 1 - y^2,\ y = x + 1,\ y \in [0,1]$ and x-axis . The **cross sections of the solid** perpendicular to the ***y*-axis** are **squares** with one side on the base.

(a) Sketch the **cross section**

(b) Sketch the **Region** for the **base**

(b) Only set up Integral that gives volume of **resulting solid**
(**Do not solve integral**)