Math 102 - Quiz#1A	_____	Name:	
Sec 5.1-5.3	10	ID No.:	Serial No.:

1. **Find** an estimate of the area under the graph of $y = \frac{1}{x}$ from $x = 1$ to $x = 2$ using four approximating rectangles and right endpoints.

2. **Express** the given limit as a definite integral and find the vaule of the intgral.

$$\lim_{n\to\infty}\left[\sum_{i=1}^{n}\frac{i^3}{n^4}\right]$$

3. **If** $f(x)=\begin{cases}|x-1| & \text{if} \quad 0\le x\le 2\\ \sqrt{9-(x-5)^2} & \text{if} \quad 2<x\le 8\end{cases}$, **find** $\int_0^8 f(x)\,dx$?

4. **Find** $g(4)+g'(4)$ if $g(x)=\int_{\sqrt{x}}^{2}\cos(\pi t^2)\ dt.$ $\left(g'(4)=\frac{dg}{dx}\Big|_{x=4}\right)$

Math 102 - Quiz#1B		Name:	
Sec 5.1-5.3	10	ID No.:	Serial No.:

1. **Find** an estimate of the area under the graph of $y = 1 + x^2$ from $x = -1$ to $x = 2$ using three approximating rectangles and right endpoints.

2. **Express** the given limit as a definite integral and **find** the vaule of the intgral.

$$\lim_{n\to\infty}\left[\sum_{i=1}^{n}\frac{i^4}{n^5}\right]$$

3. **If** $f(x)=\begin{cases}|x-1| & \text{if} \quad 0\le x\le 2\\ \sqrt{9-(x-5)^2} & \text{if} \quad 2<x\le 8\end{cases}$, **find** $\int_0^8 f(x)\,dx$?

4. **Find** $g(4)+g'(4)$ if $g(x)=\int_{\sqrt{x}}^{2}\cos(\pi t^2)\ dt.$ $\left(g'(4)=\frac{dg}{dx}\Big|_{x=4}\right)$