$QUIZ\sharp 1$ Math 101-sec 12.

Net Time Allowed: 20 minutes

Name: ID \sharp : Serial \sharp :

(Justify clearly your answer!)

Exercise1:(05 points)

Find
$$\lim_{x \to \infty} \frac{2 + \sin x}{x}$$
.

Exercise2: (05 points) Find $\lim_{x \to 0^-} \frac{|x\cos(2x) - \frac{x}{2}|}{3x}$.

*** Exercise 3: (05 points) Prove that $\lim_{x \to 3} (1 + \frac{x}{3}) = 2$.