Name:	**ID:**	**Sec: 14 22**

MATH-101 Term-131 IN-Class-QUIZ-16

(show all your work and circle one letter to get a full mark or you will get zero)

1) Evaluate $\lim_{x\to 0}\frac{\sin(5x)-5x-x2}{1-\cos(3x)}$

(a) -1/2
(b) -3/2
(c) -2/9
(d) -9/2
(e) -2
(f) -9
(g) none of the above

2) Evaluate the limit $\lim_{x\to 1+}\left(\sqrt{4x+4}\ln(x+1)\right)$

(a) 2
(b) -2
(c) *0*
(d) *infinity*
(e) *- infinity*
(f) none of the above

3) Evaluate the limit $\lim_{x\to\infty}(1+4x)^{3/\ln x}$

(a) *e^3*
(b) *e^12*
(c) *e^(3/4)*
(d) *1*
(e) Does not exist
(f) none of the above