

WRITE YOUR NAME:

MAC 2241 Quiz 2  
Wednesday February 22nd

Question 1. Evaluate the limit.

$$\lim_{h \rightarrow 0} \frac{(3+h)^2 - 9}{h}$$

$$\lim_{h \rightarrow 0} \frac{9 + 6h + h^2 - 9}{h}$$

$$= \lim_{h \rightarrow 0} \frac{6h + h^2}{h} = \lim_{h \rightarrow 0} \frac{(6+h)h}{h}$$

$$= \lim_{h \rightarrow 0} (6+h) = 6 + 0 = 6$$