

CALCULUS TEST ON LIMITS

$$\#1 \quad \lim_{A \rightarrow 0} \frac{\sqrt{1+A} - 1}{A}$$

$$\#2 \quad \lim_{x \rightarrow -3} \frac{x^3 + 27}{x + 3}$$

$$\#3 \quad \lim_{x \rightarrow -2} \frac{x^2 - 4}{x^3 + 8}$$

$$\#4 \quad \lim_{k \rightarrow 0^+} 5 - \left(\frac{1}{k}\right)^2$$

$$\#5 \quad \lim_{g \rightarrow 0} \frac{\sin 7g}{14g}$$

$$\#6 \quad \lim_{J \rightarrow 2} \frac{\sqrt{2J+3} - \sqrt{7}}{J-2}$$

$$\#7 \quad \lim_{M \rightarrow \infty} 12^{\frac{1}{M}}$$

$$\#8 \quad \lim_{P \rightarrow -\infty} \left(\frac{1}{11}\right)^P$$

(HINT: PUT SOME LARGE (-) NUMBERS IN)

$$\#9 \quad \lim_{x \rightarrow -7} (x+6)^{1997}$$

$$\#10 \quad \lim_{y \rightarrow -6} \frac{y^2 - 36}{y + 6}$$

$$\#11 \quad \lim_{D \rightarrow -3} \frac{D^2 + 7D + 12}{D + 3}$$

$$\#12 \quad \lim_{R \rightarrow 0} \frac{\cos 2R \tan 2R}{R}$$

$$\#13 \quad \lim_{\theta \rightarrow \pi/4} \frac{1 - \tan \theta}{\sin \theta - \cos \theta}$$

DEFINE LIMIT

DEFINE CONTINUITY

EXPLAIN THE INTERMEDIATE VALUE THEOREM AS IT PERTAINS TO SOLVING EQUATIONS.