Quiz 12 | Name Answer Key

For each of the limits, determine if L'Hospital's Rule applies. If it does apply, list the indeterminate form.

	L'Hospital's Rule Applies? (Y/N)	Indeterminate Form $\frac{0}{0}, \frac{\infty}{\infty}, \infty^0, 0\cdot\infty$, etc
$\lim_{x\to 0^+} (1-\cos x)^{\sin x}$	Y	0^0
$\lim_{x\to\infty} \frac{e^x}{x^3}$	Y	$\frac{\infty}{\infty}$
$\lim_{x\to 0} \frac{3x^2+6x}{12x+6}$	N	
$\lim_{x\to\infty} x^2 e^x$	N	
$\lim_{x\to -\infty} x e^x$	Y	$-\infty\cdot 0$ or $-\frac{\infty}{\infty}$
$\lim_{x\to 0} x^2 \ln x$	Y	$0\cdot -\infty$
$\lim_{x\to\infty} x^{(2+x^2)}$	N	
$\lim_{t\to 0} \frac{e^{3t}-1}{t}$	Y	$\frac{0}{0}$
$\lim_{\theta\to\frac{\pi}{2}} \frac{\cos\theta}{4\sin\theta}$	N	
$\lim_{x\to 2^-} (3-x)^{\left(\frac{x}{4-x^2}\right)}$	Y	1^∞

3-0235 — 50 SHEETS — 5 SQUARES
3-0236 — 100 SHEETS — 5 SQUARES
3-0237 — 200 SHEETS — 5 SQUARES
3-0137 — 200 SHEETS — FILLER
COMET