PRINT Your Name:_____

<center>**Quiz for November 1, 2005**</center>

Find $\lim\limits_{x \to \frac{\pi}{2}^-} (\cos x)^{\tan x}$.

ANSWER: The base is a positive number heading toward zero. The exponent is heading toward $+\infty$. If you take a fraction and raise it to a big power you get a fraction which is even closer to zero. The two parts of this problem reinforce one another! There is no conflict! The limit is zero.