MATH 120B WINTER, 2002 **Name:** _____

Quiz Five

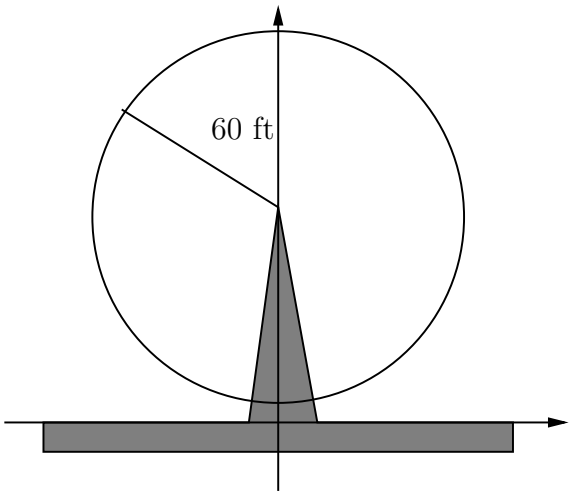
		Hui	Santosh
Section	10:30	BA	BC
(circle one)	11:30	BB	BD

No notes. No calculators.
Simplify your answers. Show your work. Please put a box around YOUR FINAL ANSWER .
There are 15 points on this quiz. Please give exact answers.

1 (3 points) Simplify $\log_3(1/3) + \ln(e^2) + \dfrac{\log_2(9)}{\log_2(3)}$.

2 (5 points) An analyst says that the price of a stock is increasing exponentially. In 1995, the stock price was \$5 per share. Four years later, it was \$8 per share. Find an exponential model $p(x)$ for the price of this stock in year $1995 + x$.

Hui is riding on a ferris wheel, as shown below. At time $t = 0$, he is at the top of the ride. The lowest point on the ferris wheel is 5 feet off the ground, and the ride rotates counter-clockwise at a constant speed of 2 RPM (revolutions per minute).



3 (4 points) Find equations for $(x(t), y(t))$, Hui's coordinates after t minutes.

4 (3 points) When is Hui first 95 feet off the ground?