The AcroTEX Online Assessment System

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The following are the rules for entering answers in the math fill-in questions for the AcroTEX Online Assessment System located at URL:

Rules for Entering Math

When responding to a Math Fill-in question, you answer by typing in your answer. Use the following notation to enter your answers.

- Use +, -, / for addition, subtraction and division, respectively. Thus $3 + \frac{x}{2}$ is typed as 3 + x/2. Use parentheses to delimit the scope of your operations, type x/(2+x) to mean $\frac{x}{2+x}$. Without the parentheses, the computer would interpret x/2 + x as $\frac{x}{2} + x$.
- Multiplication can be denoted either by * or by juxtaposition: Type 4*x or 4x for $4x$.
- Use ^ to indicate powers: Type 4x^3 for $4x^3$; 12x^-6 for $12x^{-6}$. For more complex exponents, use parentheses to characterize the exponent, type 4^(x+1) to mean 4^{x+1}.
- Use parentheses to delimit the argument of a function; i.e., type sin(x) rather than sin x.
- Use parentheses to define the *scope* of an operation: For example, type 4x(x^2+1)^3 for $4x(x^2 + 1)^3$; 4^(2x+1) for 4^{2x+1}.
- To raise a function to a power, such as $\sin^2(x)$, type either (sin(x))^2 *or* sin^2(x).
- You can also use brackets [ ] or braces { } to delimit a mathematics expression.
- Functions you may use:
  - Trig: sin, cos, tan, cot, sec, csc;
  - Inverse Trig: asin, acos, atan;
  - Log: ln (natural log), or use log; e.g. ln(x) or log(x), both of these refer to the natural logarithm.
  - Exponential: The natural exponential function, e^x, can be entered as exp(x) or as e^x.
  - The absolute function, abs(·) can also be written in the usual way |·|; thus, you can type either abs(x) or |x|.
  - Misc.: sqrt, usage sqrt(x) for $\sqrt{x}$ (or, use exponential notation: x^(1/2)).
- Spaces in answers are ignored, e.g., 4 x is the same as 4x; use spacing, however, to improve readability.

Important: When you enter your answer, use the variables referred to (or implied by) the statement of the question. For example, if the problem statement involves the variable x, use x in your answer, as needed; if the problem statement uses t, use t in your answer. If you enter a function of t when a function of x is expected, you will either receive a error message (for Acrobat Reader 5.0 or above) or there will be no response at all to the entry (for Acrobat Reader 4.0–4.05), so be careful.