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\begin\{tabular\}\{lcr\} }
$\{\backslash$ Large Quiz $\{\backslash \mathrm{bf} 5$

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Name: \makebox[2in]\{\hrulefill\} \& \hspace\{1.5in\} \& \\
Section: 8:30am or 10:30am (circle one) \& \hspace\{1.0in\} \& Math~120 \\
\makebox[2in] \& \hspace\{1.0in\} \& \{ \bf Wednesday March 7, 2001$\} \backslash$
\makebox[2in] \& \hspace\{1.0in\} \& Ron Buckmire \\
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$\backslash 2 \mathrm{~s}$
$\{\backslash$ Large $\{\backslash b f$ Topic covered:\}\} Integration by substitution
\{\small The point of this quiz is to illustrate your ability to evaluate integralsby integration by substitution.\}
\vfill
$\{\backslash$ Large $\{\backslash \mathrm{bf}$ Instructions: \}\}
\begin\{itemize\} }
- Once you open the quiz, you have 50 minutes to complete it.
- Where ever possible indicate your answer clearly, in the form of a sentence, showing all work necessary to understand your solution.
- You may not use the book or any of your class notes, but you may use a
calculator. You must work alone.
- If you use your own paper, please staple it to the quiz before coming to class.
If you don't have a stapler, buy one.
- After completing the quiz, sign the pledge below stating on your honor that you have adhered to these rules.
- Relax and enjoy....
- \{\bf This quiz is due on Friday, March 9\}, at the beginning of class. NO LATE QUIZZES WILL BE ACCEPTED.
\end\{itemize\} }
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\(\{\backslash b f\) Pledge: \(\}\) I, \makebox[2in]\{\hrulefill\}, pledge my honor as a human being and Occidental student, that \(I\) have followed all the rules above to the letter and in spirit.
\(\backslash 1 \mathrm{~s}\)
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\begin\{tabbing\} }
Math 120 Spring 2001 \` Quiz \{\bf 5\}\\
\end\{tabbing\} }
\vspace* $\{-60 \mathrm{pt}\}$
$\backslash$ begin $\{$ center $\}$
\{\large\bf SHOW ALL YOUR WORK\}
\end } \{ center \}
\vspace*\{-24pt \}
\noindent 1. \{ \bf (a) \} \{\it (4 points)\}. Evaluate the integral \$A = \displaystyle \int_1^5 \frac\{1\}\{\sqrt\{u\}\} \ du\$
\vfill
\noindent $\{\backslash \mathrm{bf}(\mathrm{b})\}\{$ it (6 points) \}. Show that your answer in $\{\backslash \mathrm{bf}(\mathrm{a})\}$ can be used to evaluate the integral $\$ B=$ ldisplaystyle $\backslash i n t \_0 \wedge 2 ~ \ f r a c\{x\}\left\{\backslash \operatorname{sqrt}\left\{x^{\wedge} 2+1\right\}\right\} d x . \$$ In other words, show how one integral can be transformed into the other via integration by substitution, and thus how \$A\$ and \$B\$.
\vfill
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