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Mathematics 105D: Calculus I

Fall Semester 2012

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Quiz #22

A. Use the Intermediate Value Theorem to show that $x^7 + x^5 - 7x + 2$ has a root in $[0,1]$.

B. As you know, the natural log function \ln is continuous on $[1,10]$.
The Intermediate Value Theorem says that for any number y between $\ln(1)$ and $\ln(10)$ there is a number c for which $\ln(c) = y$. What is that number c if $y = 1$?