

Math 10850, Honors Calculus 1

Quiz 7, Thursday October 31

Name:



My cat Emma; ordinary house cat by day, Felicity's familiar by night.



Not my cat: astonishingly, if you look hard enough, you can find pictures of *other people's cats* on the internet!

1. Give a complete and correct statement of the *Intermediate value theorem* (IVT)

2. Use the intermediate value theorem to show that there is some real number c such that $c^5 = c + 1$. (You should use the theorem directly, and not use any consequences that we have derived from the theorem, such as facts about odd-degree polynomials).