Quiz 17

Name: _____

Let $f(x) = x^3 - 2x + 1$.

1. Find the critical points of $f(x)$.

   $f'(x) = 3x^2 - 2 = 0$ has two solutions, $\pm\sqrt{2/3} \approx \pm 0.816$.

2. Find the inflection points of $f(x)$.

   $f''(x) = 6x = 0$ at $x = 0$. Check that concavity changes by plotting $y = 6x$, which goes from negative to positive. This means f changes concavity at 0, and so $x = 0$ is an inflection point.