CALCULUS H NAME _____

CH. 2 #6 IVT

VERIFY THAT THE INTERMEDIATE VALUE THEOREM APPLIES TO THE INDICATED INTERVAL AND FIND THE VALUE OF C GUARANTEED BY THE THEOREM.

1. $f(x) = x^2 + x - 1$ $[0,5]$, $f(c) = 11$

2. $f(x) = x^2 - 6x + 8$ $[0,3]$, $f(c) = 0$

3. $f(x) = x^3 - x^2 + x - 2$ $[0,3]$, $f(c) = 4$

4. $f(x) = \dfrac{x^2 + x}{x - 1}$ $\left[\dfrac{5}{2}, 4\right]$, $f(c) = 6$