

## ROLLE'S THEOREM

Suppose  $f$  is a function defined on some closed interval  $[a, b]$  such that

- (i)  $f$  is continuous on  $[a, b]$
- (ii)  $f$  is differentiable on  $(a, b)$
- (iii)  $f(a) = f(b)$

Then there is a real number  $c$  in  $(a, b)$  such that  $f'(c) = 0$ .

IDEA:

