3-2 Rolle’s Theorem and the Mean Value Theorem
Day 1 page 176 # 3 - 27 x 3's, 29, 30

Rolle’s Theorem:
1. \( f(x) \) must be continuous on (closed interval) \([a, b]\)
2. \( f(x) \) must be differentiable on (open interval) \((a, b)\)
3. \( f(a) = f(b) \)
then, there exists a "c" in \([a, b]\) such that \( f'(c) = 0 \)

1. \( f(x) = \frac{1}{x} \) \([-1, 1]\)
2. \( f(x) = \cot \frac{x}{2} \) \([\pi, 3\pi]\)

5. \( f(x) = x^2 - x - 2 \)

13. \( f(x) = (x - 1)(x - 2)(x - 3) \) \([1, 3]\)

16. \( f(x) = 3 - |x - 3| \) \([0, 6]\)