25. \( f(-1) = 1 - 1 = 0 = f(1) \). But \( f'(x) = -1 \) when \( x < 0 \) and \( f'(x) = 1 \) when \( x > 0 \). This is because \( x^2 = \{ x \in \mathbb{R} | x > 0 \} \). Also \( f'(x) \) is undefined at \( 0 \), so \( f'(x) \) is never 0. This does not contradict Rolle's Theorem because \( f \) is not differentiable on \((-1, 1)\).

33. Let \( x \in (a, b) \). Then \( f \) is continuous on \([a, x]\) and differentiable on \((a, x)\). By the MVT, there is \( c \in (a, x) \) such that \( f(x) - f(a) = f'(c)(x-a) = 0 \). \( x-a = 0 \). So \( f(x) = f(a) \). Let \( b = f(a) \). Then \( f(x) = b \) for all \( x \in [a, b] \).

35. If a car travels from A to B in one hour, then it averages 50 mph. The MVT says that at some point the instantaneous speed of the car will be 50 mph. Thus the speedometer must read 50 at least once.

38. The average increase is \( \frac{10-2}{15} = \frac{8}{15} \). At some instant, the current is the same as this average, so the current is \( \frac{8}{15} \).