

34. $f(x) = \begin{cases} x^2 & \text{if } x > 1 \\ x & \text{if } x \leq 1 \end{cases}$ is defined and continuous everywhere, and so discontinuous nowhere. Observe that $\lim_{x \rightarrow 1^-} f(x) = 1 = \lim_{x \rightarrow 1^+} f(x)$.