

$$2. \text{ (a) } \lim_{x \rightarrow -2^+} f(x) = -2$$

$$\text{(b) } \lim_{x \rightarrow -2^-} f(x) = -2$$

$$\text{(c) } \lim_{x \rightarrow -2} f(x) = -2$$

The function is continuous at  $x = -2$ .