

Set L,

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$$\text{Not } \left( \lim_{x \rightarrow a} f(x) = L \right)$$

⇔

$$\text{Not } \left( \forall \epsilon > 0 \exists \delta > 0 \forall x, 0 < |x-a| < \delta \Rightarrow |f(x)-L| < \epsilon \right)$$

⇔

The answer:

$$\exists \epsilon > 0 \forall \delta > 0 \exists x, 0 < |x-a| < \delta \text{ AND } |f(x)-L| \geq \epsilon$$