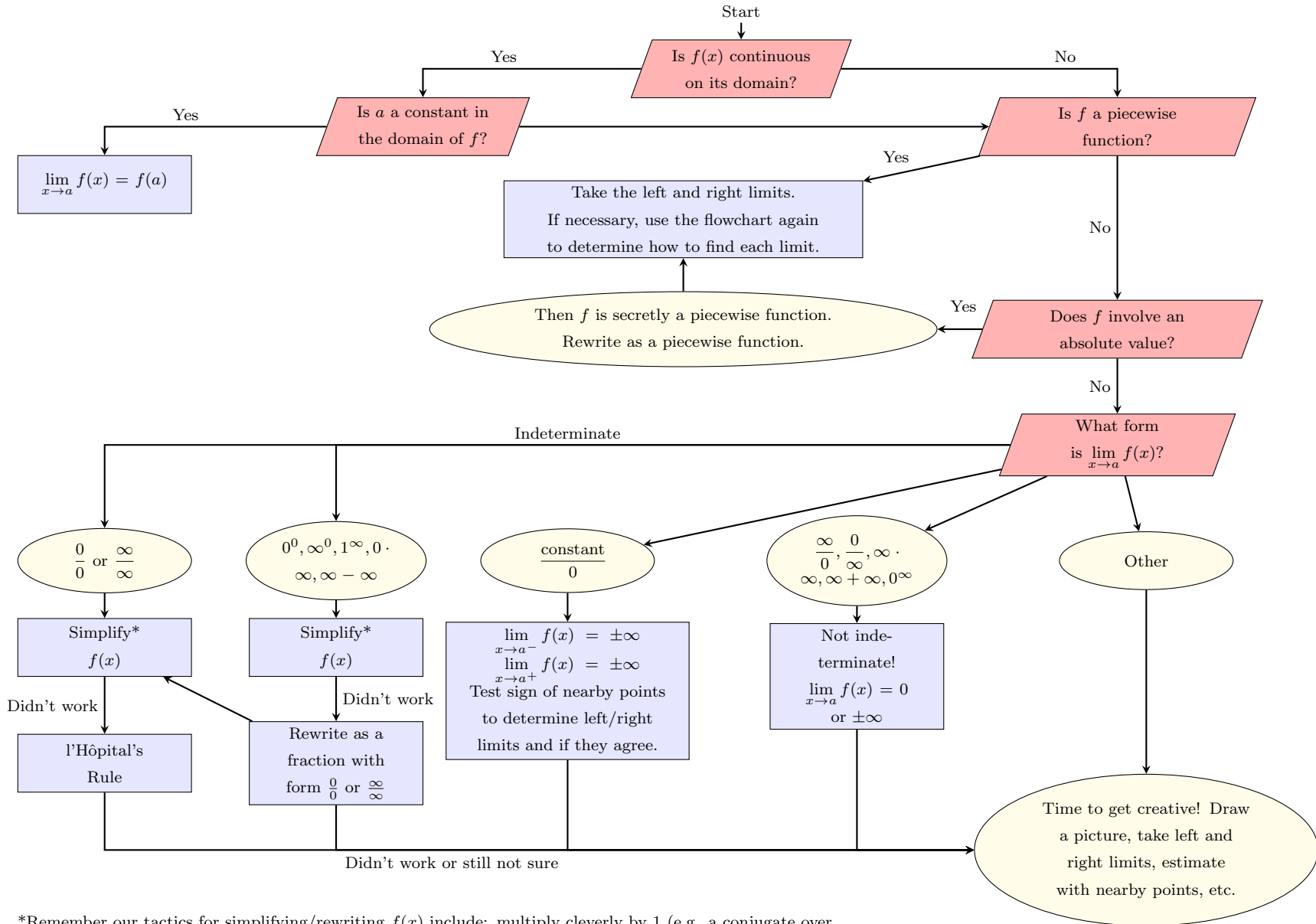


Let  $f(x)$  be a given function. This flowchart is useful for solving problems that involve finding  $\lim_{x \rightarrow a} f(x)$  where  $a$  is a constant or  $\pm\infty$ .

We cannot include every single possibility. This chart is meant to be a useful guide, but it is no substitute for your own understanding and critical thinking!



\*Remember our tactics for simplifying/rewriting  $f(x)$  include: multiply cleverly by 1 (e.g. a conjugate over itself), divide numerator and denominator by a power of  $x$ , factor and cancel, combine fractions, etc.