

QUICK REVIEW #3 – LIMITS AND CONTINUITY

Name _____

Date _____ Hour _____

_____ 1. At what point is the removable discontinuity for the function $(x) = \frac{x^2+5x-24}{x^2-x-6}$?

2. Let $f(x) = \begin{cases} x^2 - 5, & x \leq 3 \\ x + 1, & x > 3 \end{cases}$

_____ a. Find $\lim_{x \rightarrow 3^-} f(x)$

_____ b. Find $\lim_{x \rightarrow 3^+} f(x)$

_____ 3. Find $\lim_{x \rightarrow 6^+} \frac{x+2}{x^2-4x-12}$

_____ 4. Find $\lim_{x \rightarrow 0} \frac{\sin 3x}{\sin 8x}$