| A $f(x)=\frac{x^{2}-2 x-3}{x+1}$ | $f(x)=\left\{\begin{array}{cc} 2 x-1, & x<0 \\ x^{2}+x-1, & x>0 \\ 2, & x=0 \end{array}\right.$ |
| :---: | :---: |
| C $f(x)=\frac{\|x+1\|}{x+1}$ | D $f(x)=\frac{x^{2}-x-2}{x^{2}+2 x+1}$ |
| $f(x)=\left\{\begin{array}{cl} \frac{\sin x}{x} & x \neq 0 \\ 1 & x=0 \end{array}\right.$ | $f(x)=\left\{\begin{array}{cc} e^{x} & x<0 \\ \ln \|x+1\| & x>0 \end{array}\right.$ |
| G $f(x)=\frac{x^{2}+2 x-8}{x-2}$ | H $f(x)=\frac{x^{2}-x-2}{x^{2}-4 x+4}$ |
| $f(x)=\left\{\begin{array}{cc} x^{2} & x<2 \\ x & x \geq 2 \end{array}\right.$ |  |


| $\lim _{x \rightarrow-1} f(x)=-4$ | $\begin{gathered} 1 \\ \lim _{x \rightarrow 0} f(x)=-1 \end{gathered}$ <br> $f(x)$ is not continuous at $x=0$ |
| :---: | :---: |
| 4 $\lim _{x \rightarrow-1^{-}} f(x)$ exists $\lim _{x \rightarrow-1} f(x)$ does not exist | $2$ <br> The limit of $f(x)$ as $x$ approaches -1 does not exist due to unbounded behavior. |
| $9$ <br> $f(x)$ is continuous at $x=0$ | $5$ <br> $\lim _{x \rightarrow 0} f(x)$ does not exist |
| $7$ <br> $f(x)$ has a removable discontinuity at $x=2$ | $8$ <br> $f(x)$ has a vertical asymptote at $x=2$ |
| $6$ <br> $f(2)$ is defined |  |



