Graphing Activity – Honors Calculus

Sketch a graph of a function, f(x) with the following properties:

Names: _____

- V.A. x = -4 and 6
- H.A. y = 3
- $f(-5)=0$
- $f(3)=-3$
- $f(-7)=6$
- $\lim_{x\to 3^+} f(x)=-5$
- $\lim_{x\to 3^-} f(x)=1$
- $\lim_{x\to 6^+} f(x)=\infty$
- $\lim_{x\to 6^-} f(x)=-\infty$
- $\lim_{x\to 0} f(x)=3$
- $\lim_{x\to -2} f(x)=6$
- $\lim_{x\to \infty} f(x)=3$
- $\lim_{x\to -4^+} f(x)=\infty$
- $\lim_{x\to -4^-} f(x)=-\infty$
- $\lim_{x\to -7} f(x)=2$
- $\lim_{x\to -\infty} f(x)=3$