# Math 114 Fall 2017 <br> Calculus I HW 2 <br> Due Wednesday, September 13 

1. Find, with proof, $\lim _{x \rightarrow 3} 4 x$.
2. Find, with proof, $\lim _{x \rightarrow 2}(x+1)^{2}$.
3. Find, with proof, $\lim _{x \rightarrow 1} x^{2}$.
4. Find, with proof, $\lim _{x \rightarrow 3} \frac{x^{2}-9}{x-3}$.
5. $\star$ Find, with proof, $\lim _{x \rightarrow 2} \frac{1}{x-1}$.
6. ( $\star$ ) Find (with proof) $\lim _{x \rightarrow 5} \frac{1}{x-4}$.
