

1.6 Algebraic Manipulation to Find Limits

Calculus

Name: _____

CA #1

Find the value of each limit.

1. $\lim_{x \rightarrow -3} (2x^2 + x - 5)$	2. $\lim_{x \rightarrow 5} \sqrt{3x - 11}$	3. $\lim_{x \rightarrow 0} (-5)$
4. $\lim_{x \rightarrow -1} \frac{x^2 - 3x + 9}{x}$	5. $\lim_{x \rightarrow 2} \frac{x^2 + 3x}{x - 2}$	6. $\lim_{x \rightarrow -3} \frac{2x^2 + 7x + 3}{x + 3}$
7. $\lim_{x \rightarrow 7} \frac{-x^2 + 13x - 42}{x - 7}$	8. $\lim_{x \rightarrow 0} \frac{\sin(4x)}{3x}$	
9. $\lim_{x \rightarrow 0} \frac{1 - \cos(4x)}{2x}$	10. $\lim_{x \rightarrow 0} \frac{\sin^2(5x)}{4x^2}$	

6. -5	7. -1	8. $\frac{3}{4}$	9. 0	10. $\frac{4}{25}$
1. 10	2. 2	3. -5	4. -13	5. Does not exist

Answers to 1.6 CA #1