

1.6 Algebraic Manipulation to Find Limits

Calculus

Name: _____

CA #2

Find the value of each limit.

1. $\lim_{x \rightarrow 1} (4x - 2x^2)$	2. $\lim_{x \rightarrow 3} 1$	3. $\lim_{x \rightarrow \frac{\pi}{4}} \sin(2x)$
4. $\lim_{x \rightarrow -5} \frac{3x^3 + 14x^2 - 5x}{x^2 + 5x}$	5. $\lim_{x \rightarrow 0} \frac{10x^2 - 3x}{x}$	6. $\lim_{x \rightarrow 3} \frac{x^2 - x - 6}{3 - x}$
7. $\lim_{x \rightarrow 0} \frac{\sin(2x)}{5x}$	8. $\lim_{x \rightarrow 0} \frac{1 - \cos(3x)}{10x}$	9. $\lim_{x \rightarrow 0} \frac{\sin^2(6x)}{9x^2}$

1. 2		2. 1		3. 1		4. -16		5. -3	
6. -5		7. $\frac{5}{2}$		8. 0		9. 4			

Answers to 1.6 CA #2