Lecture 10: The Chain Rule

Goal: Differentiate functions of the form $f(g(x))$.
Summary:

$(f(g(x)))' = f'(g(x)) \cdot g'(x)$		
$\frac{d}{dx}(f \circ g) = \frac{df}{dg} \cdot \frac{dg}{dx}$		
$[g(x)^p]' = p(g(x))^{p-1} \cdot g'(x)$	$(b^x)' = b^x \cdot \ln(b)$	$(\sin(\theta^\circ))' = \frac{\pi}{180}\cos(\theta^\circ)$