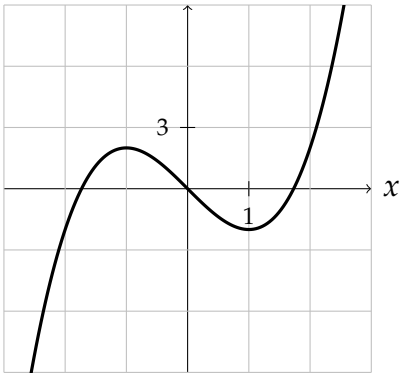
Lecture Handout #11: Oct 6

Derivatives of Power Functions

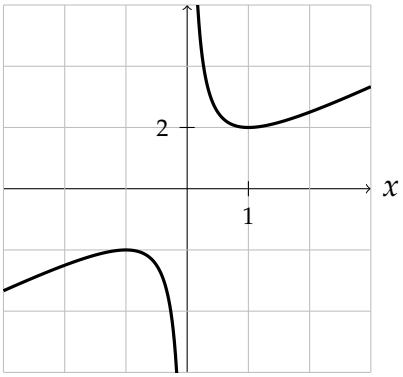
$f(x)$	$f'(x)$	$f(x)$	$f'(x)$	$f(x)$	$f'(x)$
x					
x^2					
x^3					

Graphs of First and Second Derivatives

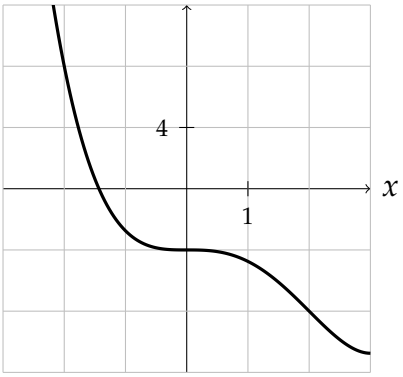
$f(x) = x^3 - 3x$



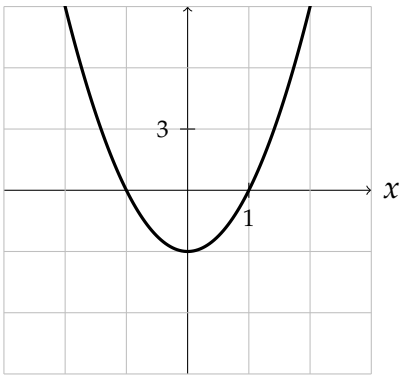
$g(x) = x + 1/x$



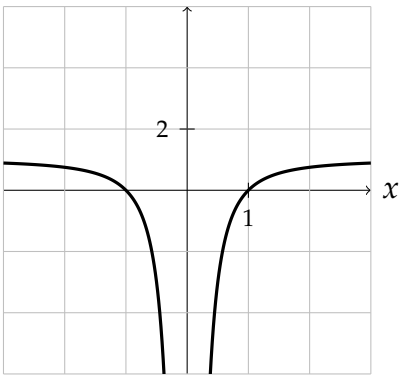
$h(x) = x^4/4 - x^3 - 4$



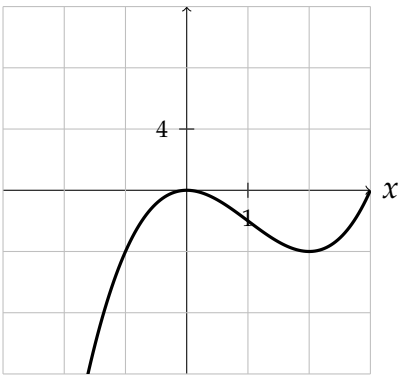
$f'(x) =$ $3x^2 - 3$



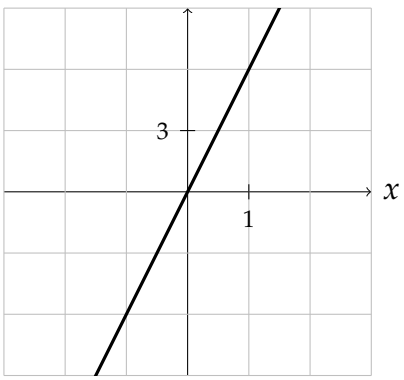
$g'(x) =$ $1 - 1/x^2$



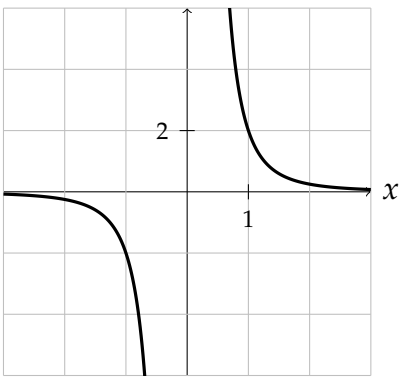
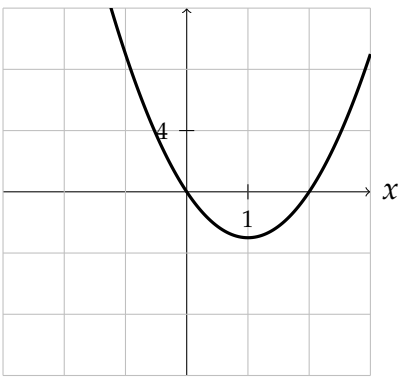
$h'(x) =$ $x^3 - 3x^2$



$f''(x) =$ $6x$



$g''(x) =$ $2/x^3$



$h''(x) =$ $3x^2 - 6x$