

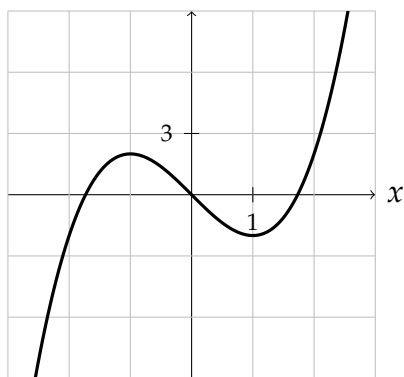
Lecture Handout #11: Oct 6

Derivatives of Power Functions

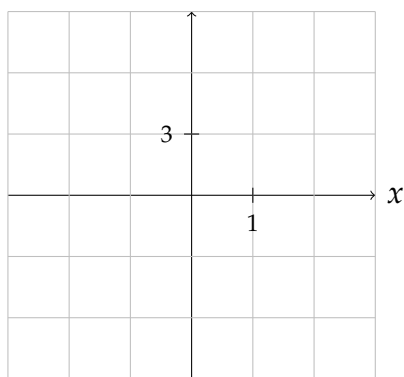
$f(x)$	$f'(x)$	$f(x)$	$f'(x)$	$f(x)$	$f'(x)$
x	_____	_____	_____	_____	_____
x^2	_____	_____	_____	_____	_____
x^3	_____	_____	_____	_____	_____

Graphs of First and Second Derivatives

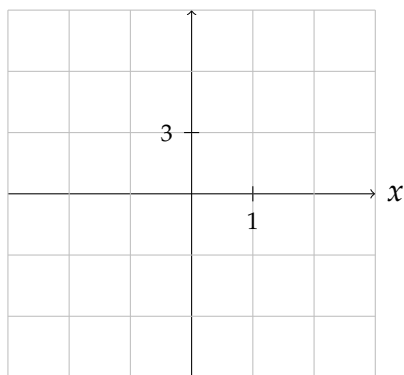
$$f(x) = x^3 - 3x$$



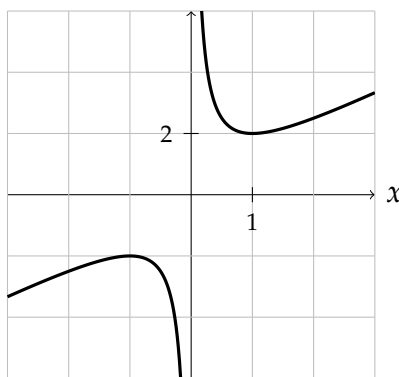
$$f'(x) = \underline{\hspace{2cm}}$$



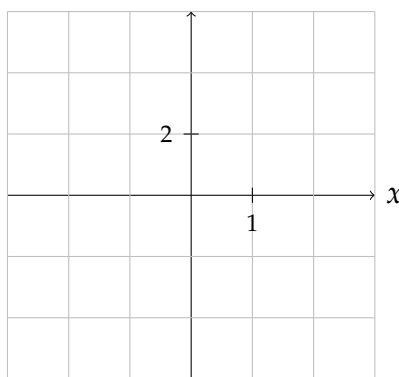
$$f''(x) = \underline{\hspace{2cm}}$$



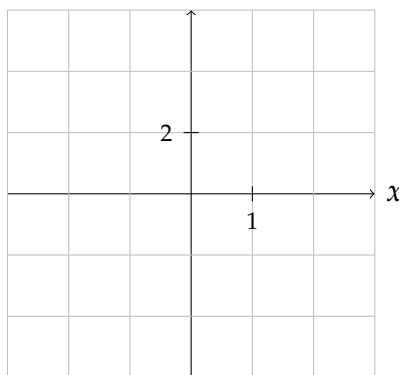
$$g(x) = x + 1/x$$



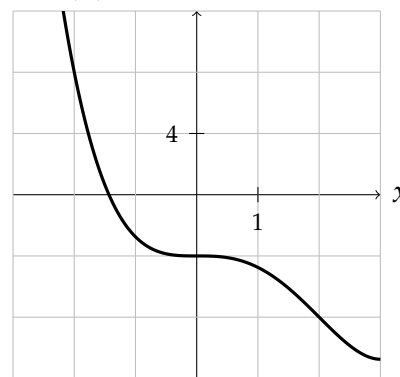
$$g'(x) = \underline{\hspace{2cm}}$$



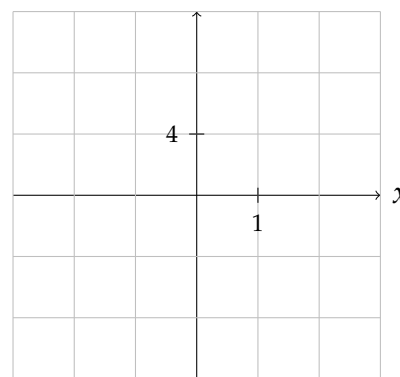
$$g''(x) = \underline{\hspace{2cm}}$$



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



$$h'(x) = \underline{\hspace{2cm}}$$



$$h''(x) = \underline{\hspace{2cm}}$$

