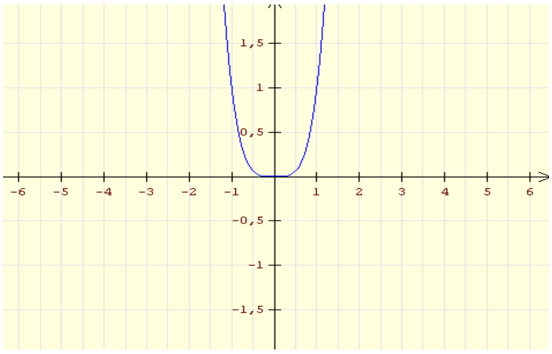
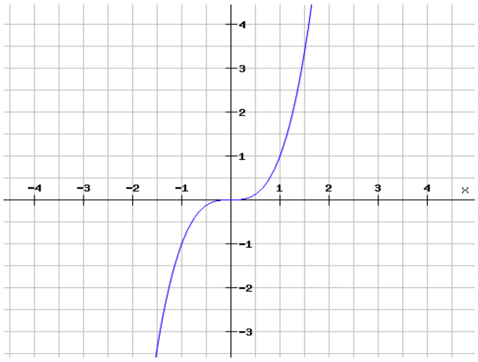
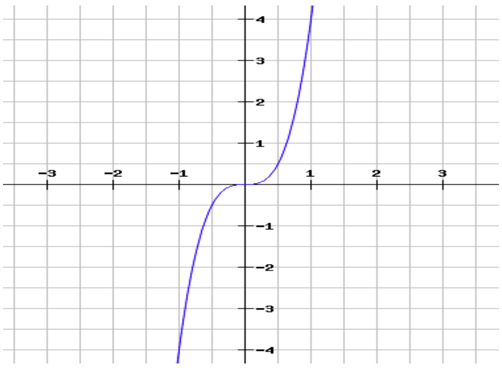
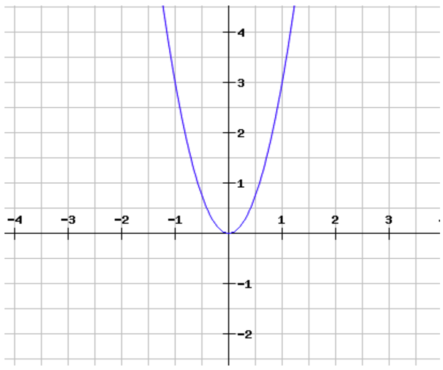
Sonderfälle bei lokalen Extrema:

$f(x) = x^4$	$f(x) = x^3$
	
Extremum:	Extremum:
$f'(x) =$ 	$f'(x) =$ 
$f'(x) = 0$ $\Leftrightarrow x_0 =$	$f'(x) = 0$ $\Leftrightarrow x_0 =$
$f''(x) =$	$f''(x) =$
$f''(x_0) =$	$f''(x_0) =$

Wenn $f'(x_0) = 0$ und $f''(x_0) =$

- dann hat f in x_0 ein Maximum, wenn
- dann hat f in x_0 ein Minimum, wenn
- dann hat f in x_0 kein Maximum oder Minimum, wenn