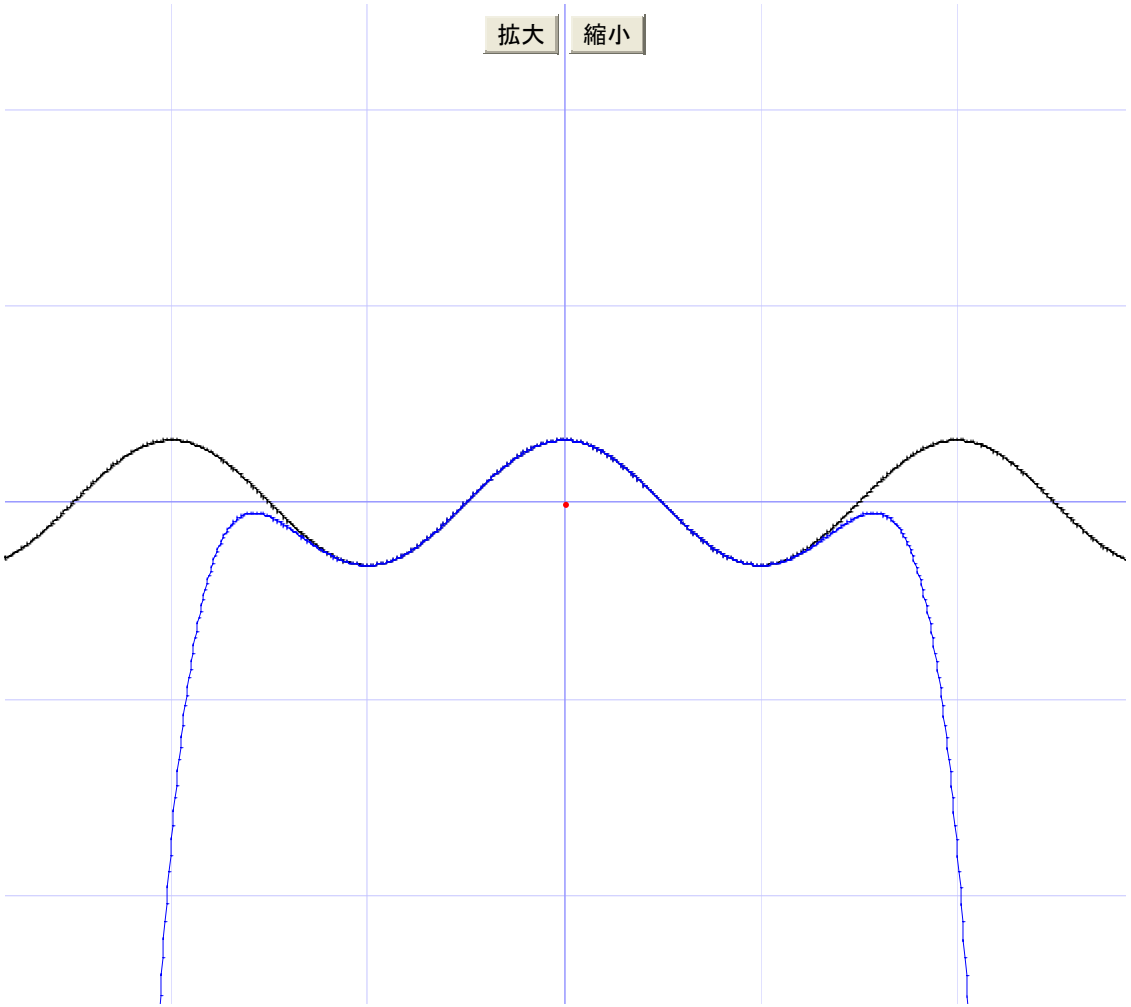

cos x のマクローリン展開

y = x

$\cos x = 1 - x^2/2! + x^4/4! - x^6/6! + x^9/9!$
$+ \ldots\ldots + (-1)^m x^{2m}/(2m)! + \ldots\ldots$

は cos x のマクローリン展開と呼ばれます。

... n = 2m のとき

y = cos x のグラフと
$y = 1 - x^2/2! + x^4/4! - x^6/6! \quad + \ldots\ldots + (-1)^m x^{2m}/(2m)!$

のグラフを比べて見ましょう

続きます

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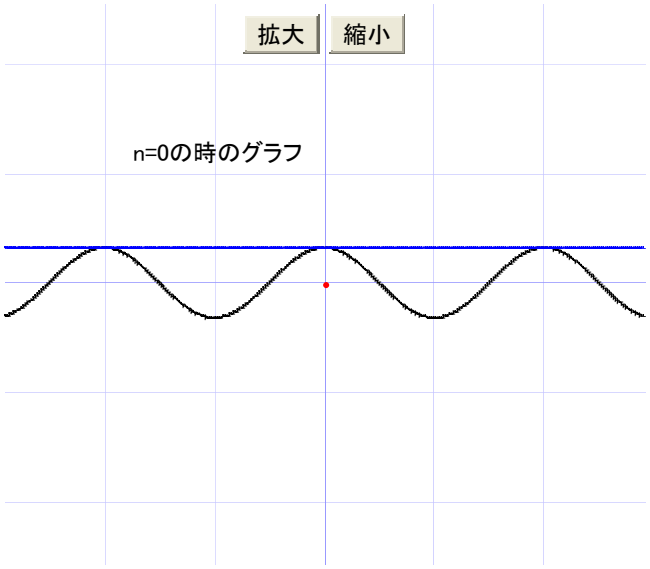
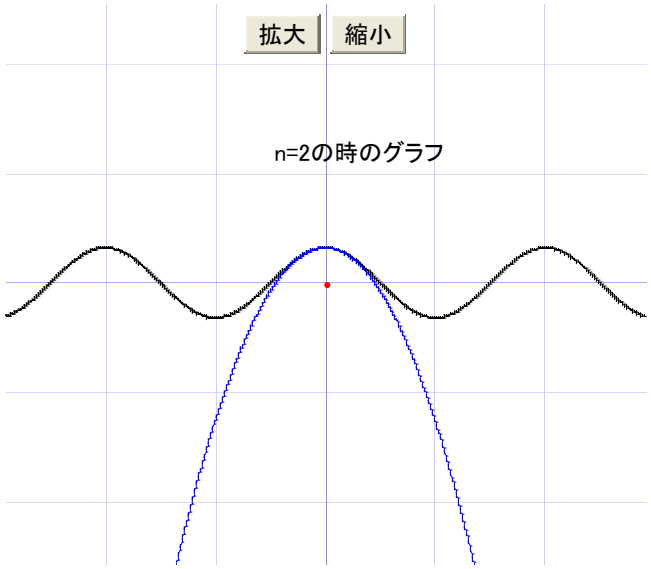
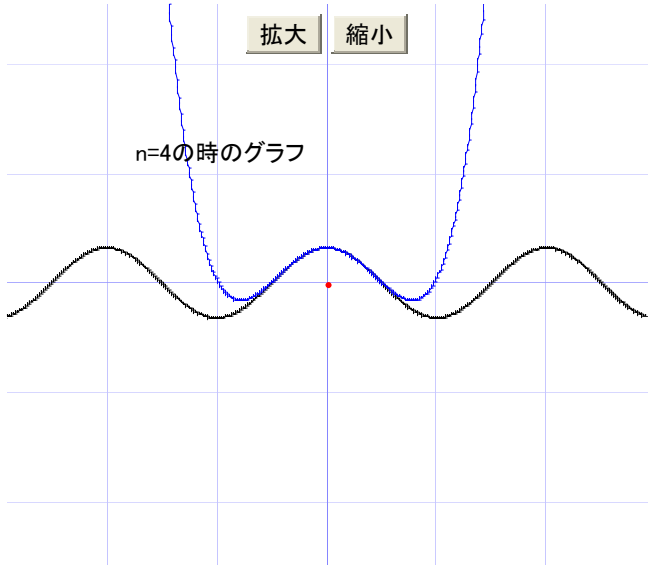
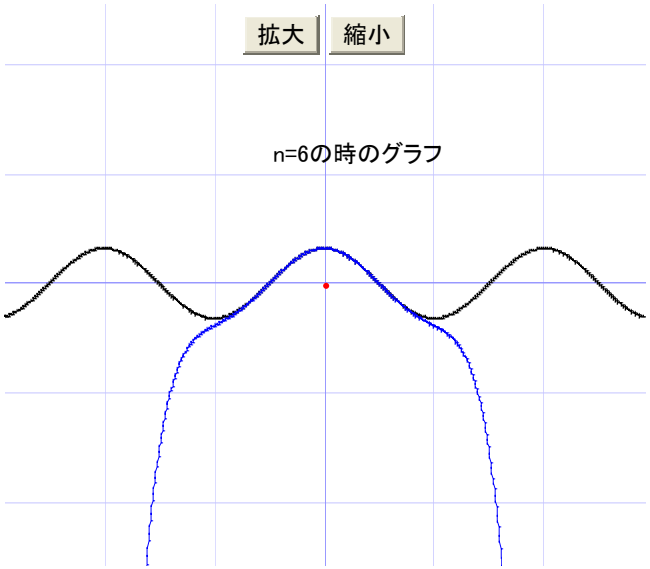
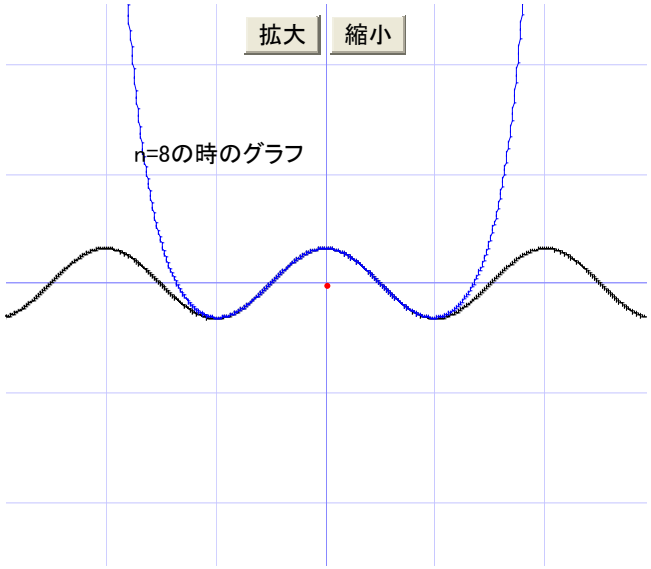
sin x の展開　e^x の展開

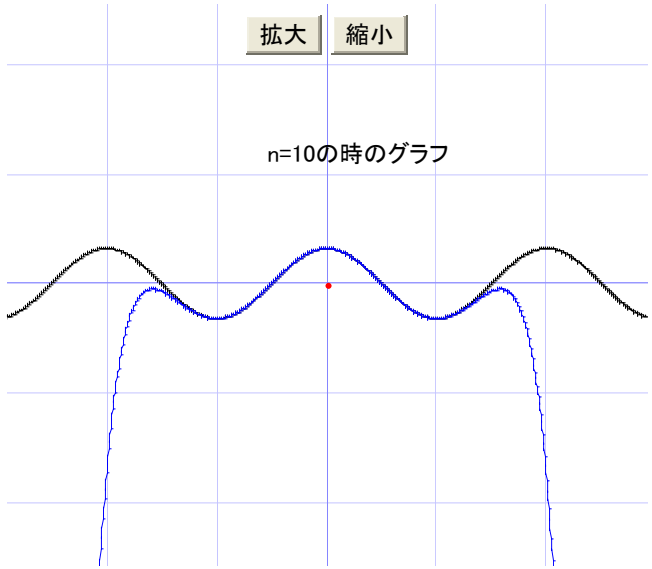

拡大
縮小
n=0の時のグラフ

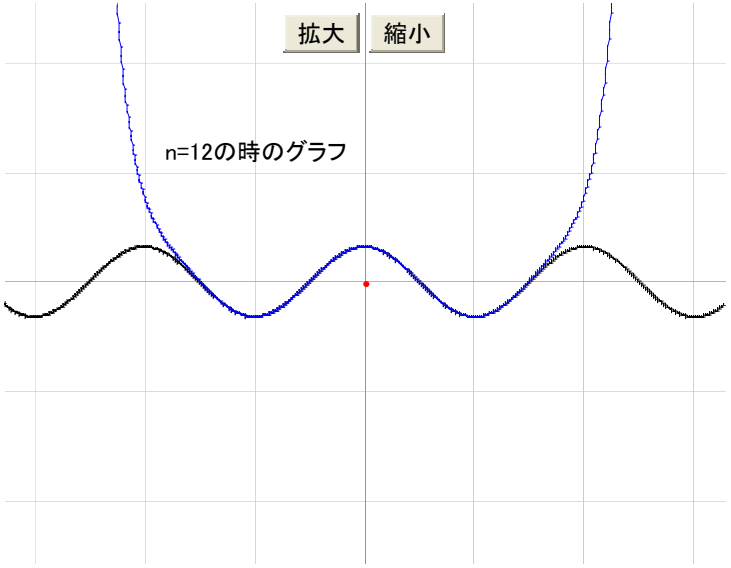

拡大
縮小
n=2の時のグラフ

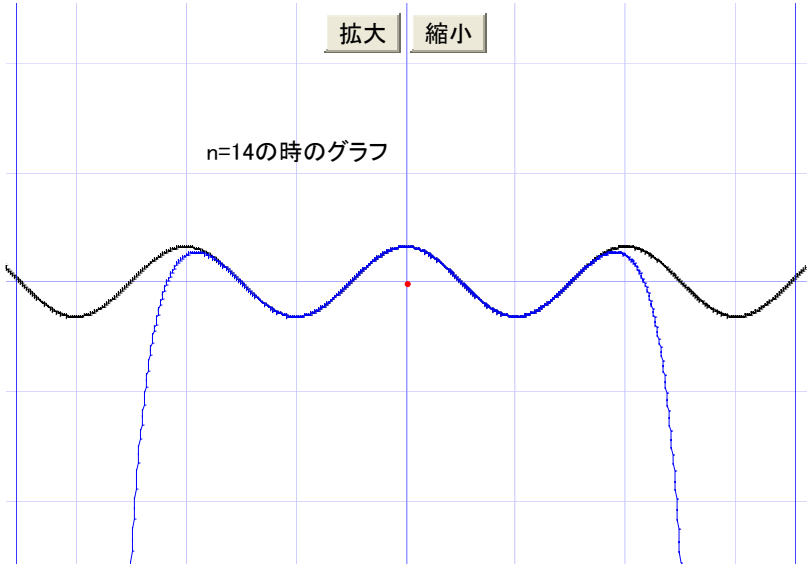

拡大
縮小
n=4の時のグラフ

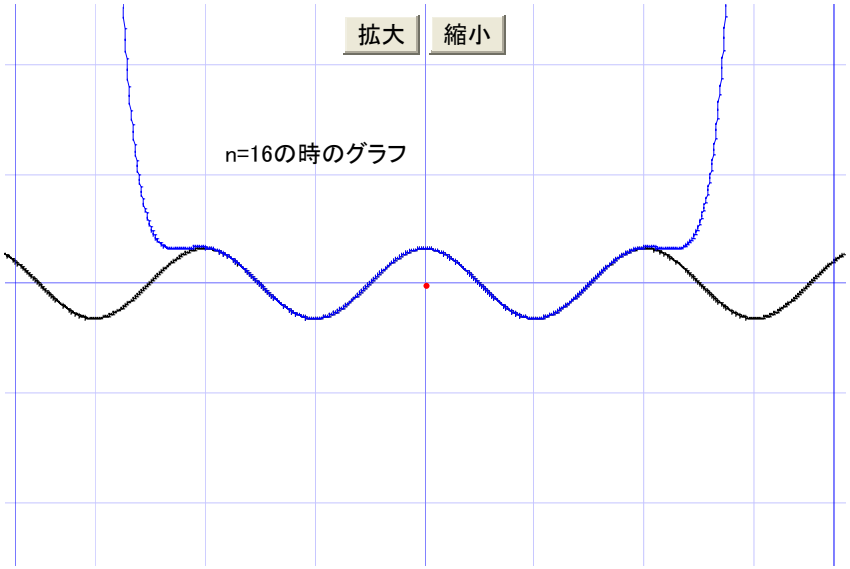

拡大
縮小
n=6の時のグラフ

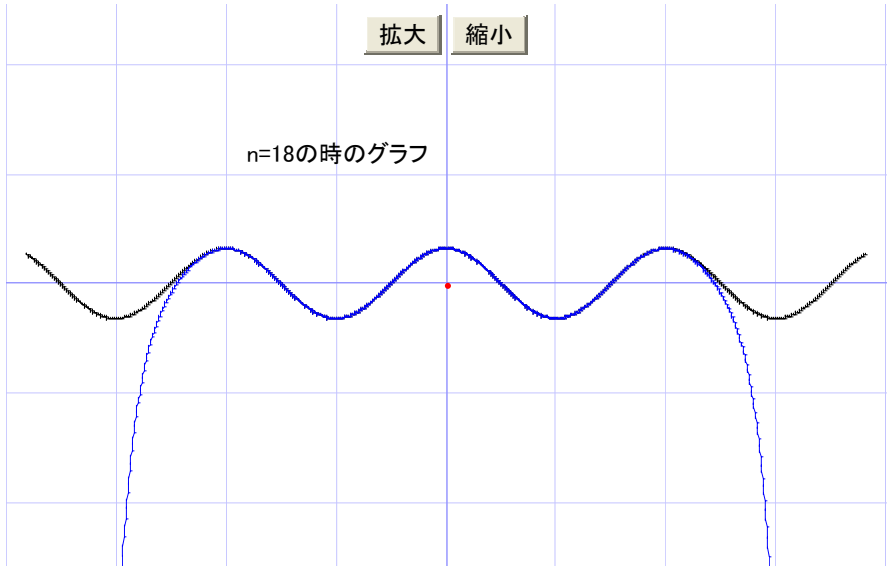

拡大
縮小
n=8の時のグラフ


拡大
縮小
n=10の時のグラフ


拡大
縮小
n=12の時のグラフ


拡大
縮小
n=14の時のグラフ


拡大
縮小
n=16の時のグラフ


拡大
縮小
n=18の時のグラフ