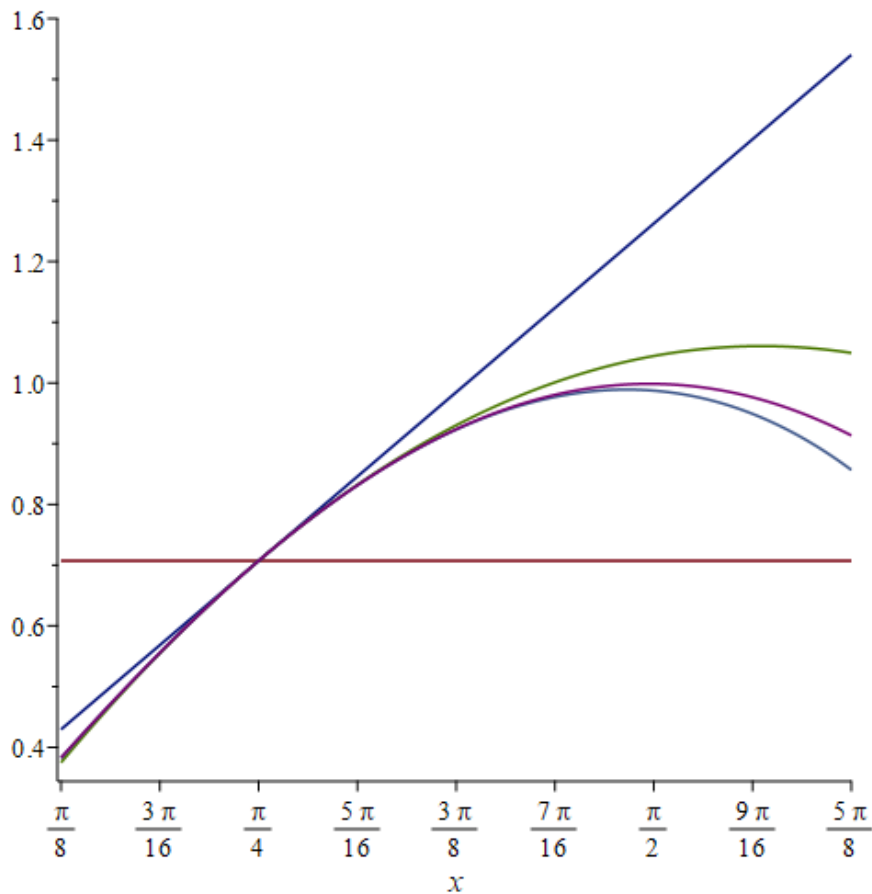


Approximation I



The first in a series of approximations

Depicted are the first five Taylor-approximations to the sine function at $\pi/4$

The n -th Taylor approximation is a polynomial of degree n

For the n -th Taylor approximation, for k smaller than n ,

its k -th derivative agrees with the k -th derivative of the function

at a point