$f(x)$	Maclaurin polynomial	reminder	remarks
e^{x}	$P_n(x) = 1 + x + \frac{x^2}{2!} + \frac{x^3}{3!} + \ldots + \frac{x^n}{n!}$	$R_n(x) = \frac{e^{c}}{(n+1)!}\, x^{n+1}$	
$\sin(x)$	$P_n(x) = x - \frac{x^3}{3!} + \frac{x^5}{5!} + \ldots + (-1)^k \frac{x^{2k+1}}{(2k+1)!}$	$R_n(x) = \frac{(-1)^{k+1}\cos(c)}{(2k+3)!}\, x^{2k+3}$	$n = 2k+1$
$\cos(x)$	$P_n(x) = 1 - \frac{x^2}{2!} + \frac{x^4}{4!} + \ldots + (-1)^k \frac{x^{2k}}{(2k)!}$	$R_n(x) = \frac{(-1)^{k+1}\cos(c)}{(2k+2)!}\, x^{2k+2}$	$n = 2k$
$\ln(1+x)$	$P_n(x) = x - \frac{x^2}{2} + \frac{x^3}{3} + \ldots + (-1)^{n-1} \frac{x^n}{n}$	$R_n(x) = \frac{(-1)^n}{(n+1)(1+c)^{n+1}}\, x^{n+1}$	
$\arctan(x)$	$P_n(x) = x - \frac{x^3}{3} + \frac{x^5}{5} + \ldots + (-1)^k \frac{x^{2k+1}}{2k+1}$		$n = 2k+1$
$(1+x)^r$	$P_n(x) = 1 + \binom{r}{1} x + \binom{r}{2} x^2 + \ldots + \binom{r}{n} x^n$		$r \in \mathbb{R}$
$\frac{1}{1-x}$	$P_n(x) = 1 + x + x^2 + \ldots + x^n$		

Table 1.1: Maclaurin polynomials of degree $n \in \mathbb{N}$ and corresponding remainders for some elementary functions.