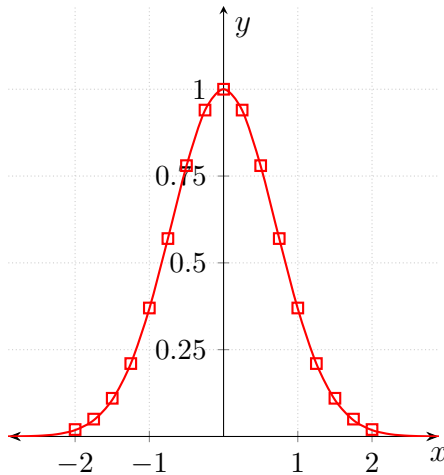


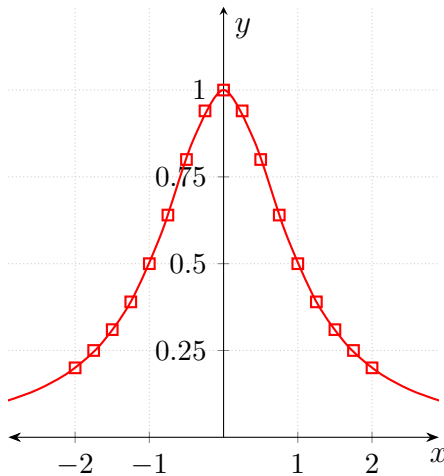
1. Verlauf von Funktionen

1) Gaußverteilung: $f(x) = \exp(-x^2)$ für $x \in [-2 : 2]$



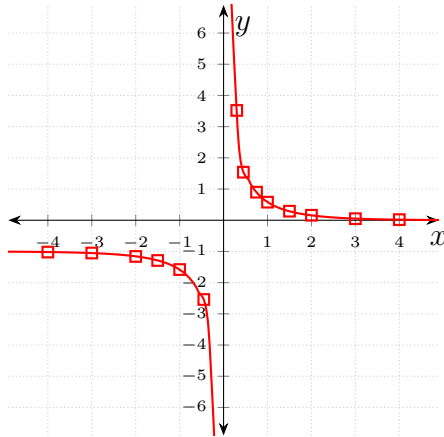
$f(-2) = 0.02$	$f(0) = 1$
$f(-1.75) = 0.05$	$f(0.25) = 0.94$
$f(-1.5) = 0.11$	$f(0.5) = 0.78$
$f(-1.25) = 0.21$	$f(0.75) = 0.57$
$f(-1) = 0.37$	$f(1) = 0.37$
$f(-0.75) = 0.57$	$f(1.25) = 0.21$
$f(-0.5) = 0.78$	$f(1.5) = 0.11$
$f(-0.25) = 0.94$	$f(1.75) = 0.05$
	$f(2) = 0.02$

2) Lorentzkurve: $f(x) = 1/(1 + x^2)$ für $x \in [-2 : 2]$



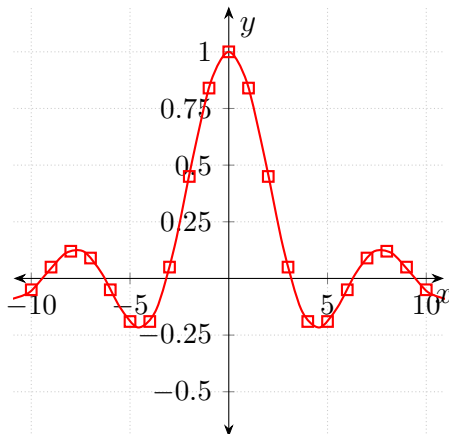
$f(-2) = 0.2$	$f(0) = 1$
$f(-1.75) = 0.25$	$f(0.25) = 0.94$
$f(-1.5) = 0.31$	$f(0.5) = 0.8$
$f(-1.25) = 0.39$	$f(0.75) = 0.64$
$f(-1) = 0.5$	$f(1) = 0.5$
$f(-0.75) = 0.64$	$f(1.25) = 0.39$
$f(-0.5) = 0.8$	$f(1.5) = 0.31$
$f(-0.25) = 0.94$	$f(1.75) = 0.25$
	$f(2) = 0.2$

3) Bose-Einstein Verteilung: $f(x) = 1/(e^x - 1)$ für $x \in [0 : 4]$

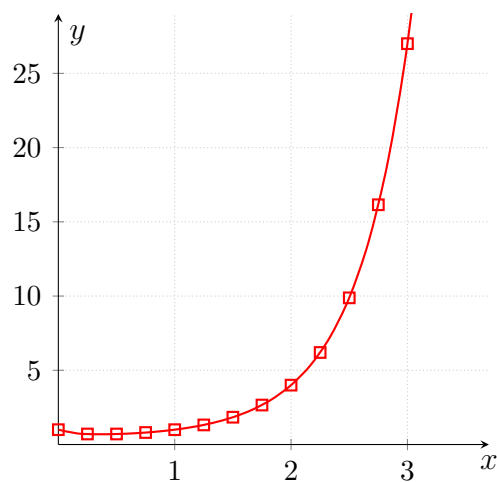


$f(-4) = -1.02$	$f(0) = \text{nicht definiert}$
$f(-3) = -1.05$	$f(0.25) = 3.52$
$f(-2) = -1.16$	$f(0.5) = 1.54$
$f(-1.5) = -1.29$	$f(0.75) = 0.9$
$f(-1) = -1.58$	$f(1) = 0.58$
$f(-0.75) = -1.9$	$f(1.5) = 0.29$
$f(-0.5) = -2.54$	$f(2) = 0.16$
$f(-0.25) = -4.52$	$f(3) = 0.05$
	$f(4) = 0.02$

4) Sinc-Funktion: $f(x) = \sin(x)/x$ für $x \in [-10 : 10]$



$f(-10) = -0.05$	$f(0) = 1$
$f(-9) = 0.05$	$f(1) = 0.84$
$f(-8) = 0.12$	$f(2) = 0.45$
$f(-7) = 0.09$	$f(3) = 0.05$
$f(-6) = -0.05$	$f(4) = -0.19$
$f(-5) = -0.19$	$f(5) = -0.19$
$f(-4) = -0.19$	$f(6) = -0.05$
$f(-3) = 0.05$	$f(7) = 0.09$
$f(-2) = 0.45$	$f(8) = 0.12$
$f(-1) = 0.84$	$f(9) = 0.05$
	$f(10) = -0.05$

5) $f(x) = x^x$ für $x \in [0 : 3]$ 

$$f(-10) = -0.05$$

$$f(-9) = 0.05$$

$$f(-8) = 0.12$$

$$f(-7) = 0.09$$

$$f(-6) = -0.05$$

$$f(-5) = -0.19$$

$$f(-4) = -0.19$$

$$f(-3) = 0.05$$

$$f(-2) = 0.45$$

$$f(-1) = 0.84$$

$$f(0) = 1$$

$$f(1) = 0.84$$

$$f(2) = 0.45$$

$$f(3) = 0.05$$

$$f(4) = -0.19$$

$$f(5) = -0.19$$

$$f(6) = -0.05$$

$$f(7) = 0.09$$

$$f(8) = 0.12$$

$$f(9) = 0.05$$

$$f(10) = -0.05$$