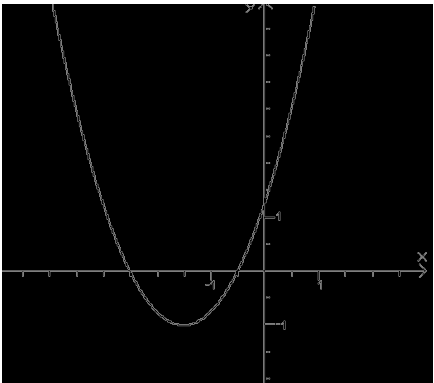
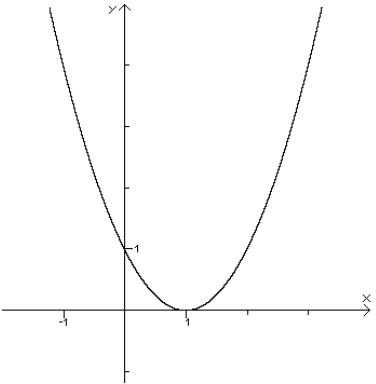
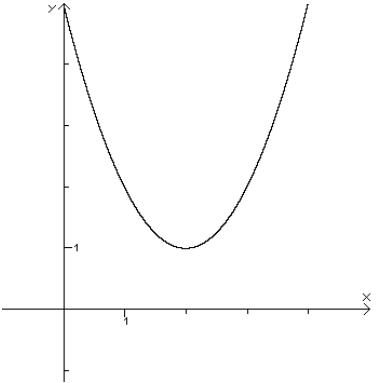


3.2.5. Lösungsmengen bei quadratischen Gleichungen

$f(x) = (x + 1,5)^2 - 1$ $f(x) = x^2 + 3x + 1,25$  <p>$x_{0_1} = -2,5, x_{0_2} = -0,5$ zwei Nullstellen</p>	$0 = x^2 + 3x + 1,25$ $x_{1/2} = -1,5 \pm \sqrt{2,25 - 1,25}$ $x_{1/2} = -1,5 \pm \sqrt{1}$ $x_{1/2} = -1,5 \pm 1$ $x_1 = -2,5$ $x_2 = -0,5$ <p>zwei Lösungen</p>
$f(x) = (x - 1)^2$ $f(x) = x^2 - 2x + 1$  <p>$x_0 = 1$ eine Nullstelle</p>	$0 = x^2 - 2x + 1$ $x_{1/2} = 1 \pm \sqrt{1 - 1}$ $x_{1/2} = 1 \pm \sqrt{0}$ $x_{1/2} = 1 \pm 0$ $x = 1$ <p>eine Lösung</p>
$f(x) = (x - 2)^2 + 1$ $f(x) = x^2 - 4x + 5$  <p>keine Nullstelle</p>	$0 = x^2 - 4x + 5$ $x_{1/2} = 2 \pm \sqrt{4 - 5}$ $x_{1/2} = 2 \pm \sqrt{-1}$ $L = \emptyset$ <p>keine Lösung</p>