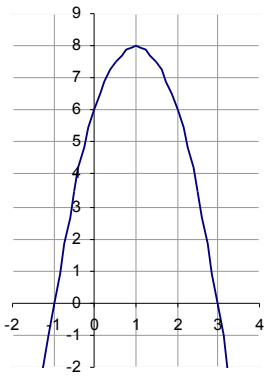
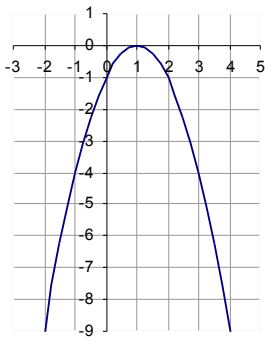
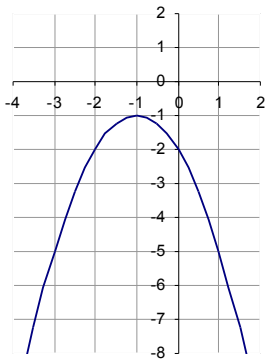
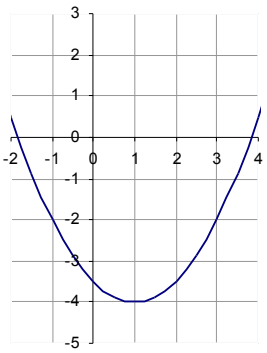
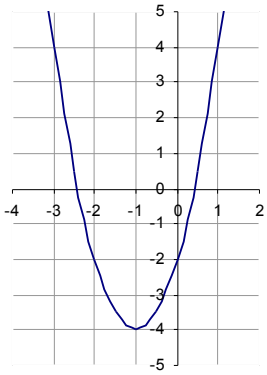
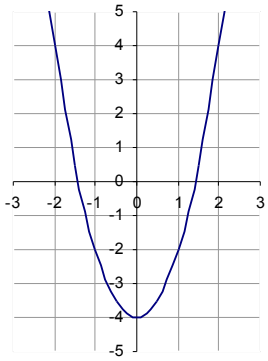
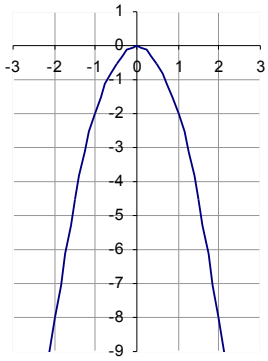
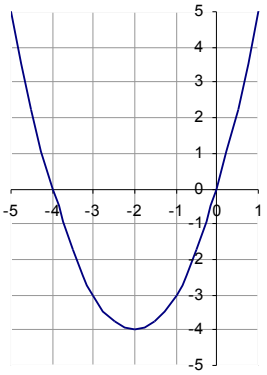
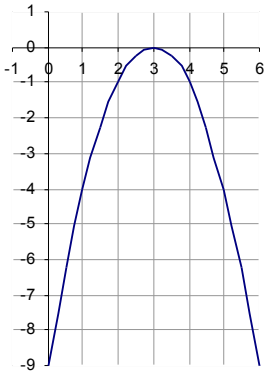
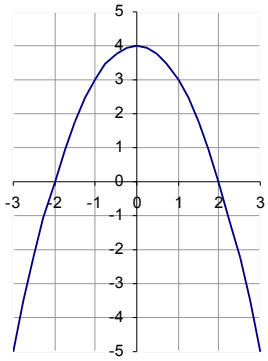
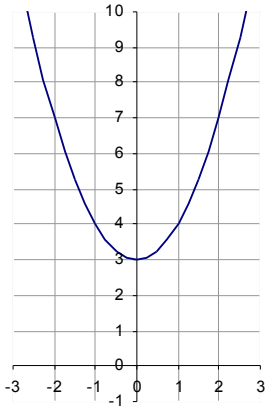
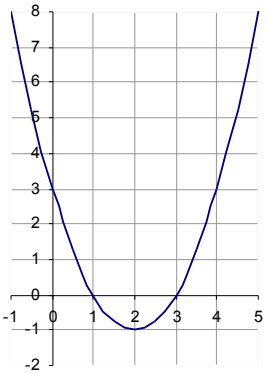
Quadratische Funktionen und ihre Schaubilder

Entlang den dickeren Linien ausschneiden; jeweils das Schaubild auf einem Kärtchen gehört zu der Funktionsgleichung auf dem nächsten Kärtchen

$f(x)=(x-2)^2-1$	$f(x)=-(x-3)^2$	$f(x)=-x^2+4$	$f(x)=x^2+3$
			
$f(x)=-2(x-1)^2+8$	$f(x)=-(x-1)^2$	$f(x)=-(x+1)^2-1$	$f(x)=0{,}5(x-1)^2-4$
			
$f(x)=2(x+1)^2-4$	$f(x)=2x^2-4$	$f(x)=-2x^2$	$f(x)=(x+2)^2-4$
			

So findet man die Schaubilder:

$$f(x) = -2\,(x + 4)^2 + 3$$

Parabel nach unten geöffnet Parabel um 4 nach links verschoben Parabel um 3 nach oben verschoben

Parabel gestreckt: vom Scheitel aus 1 nach rechts/links und 2 nach oben (unten)