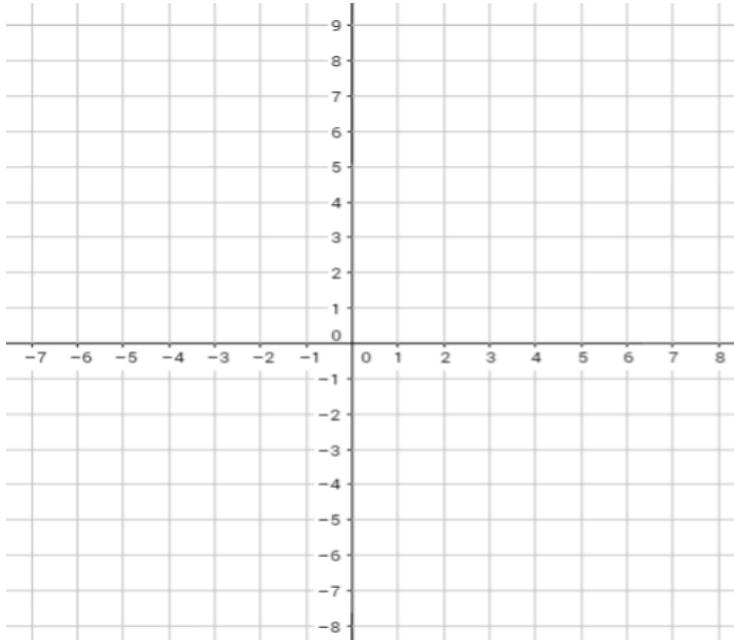
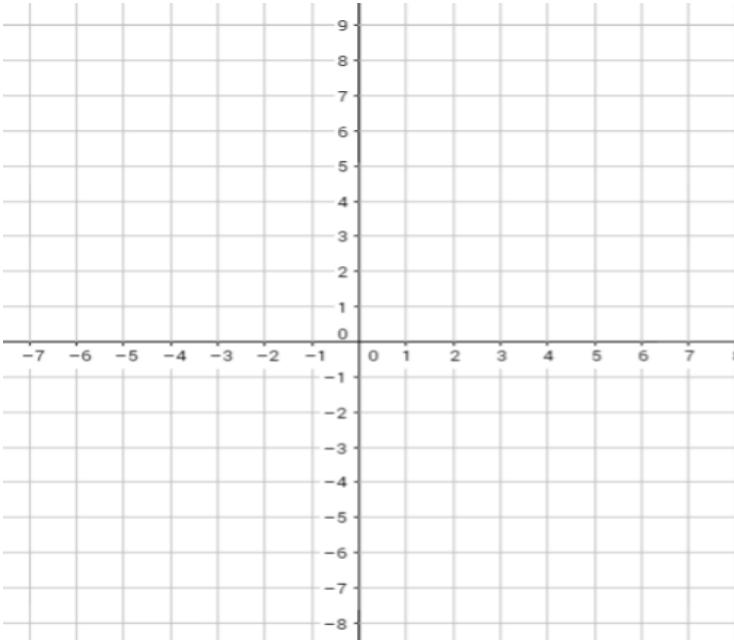
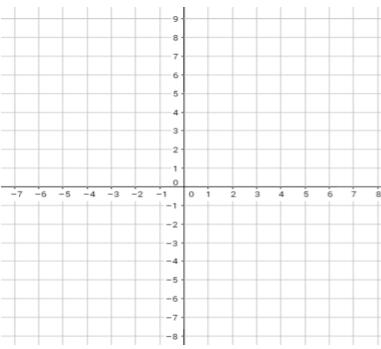
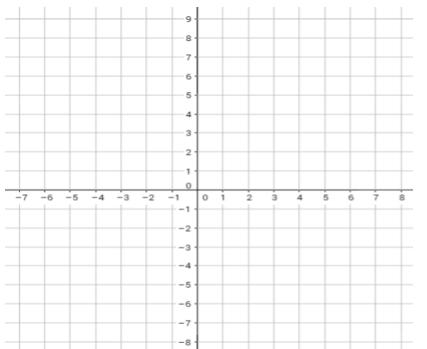
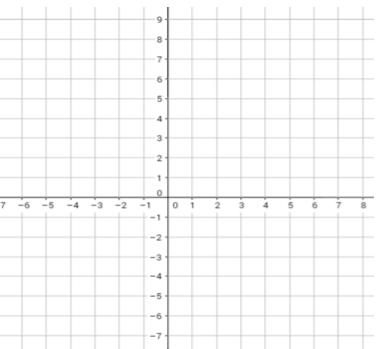
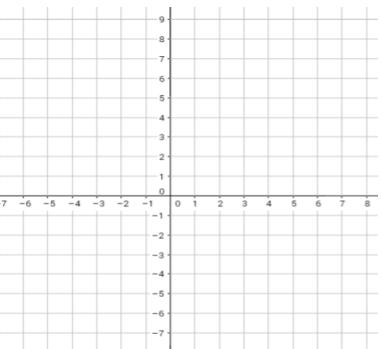


Eigenschaften der Potenzfunktionen $f(x) = a \cdot x^n$

Eigenschaften	$f(x) = x^n$ n gerade, $n \in \mathbb{N}$	$f(x) = x^2, x^4, x^6, \dots$	$f(x) = x^n$ n ungerade	$f(x) = x^3, x^5, x^7, \dots$
Form (Skizze von 3 Funktionen)	 <p>A Cartesian coordinate system with x and y axes ranging from -7 to 8. The x-axis is labeled with integers from -7 to 8. The y-axis is labeled with integers from -8 to 9. Three symmetric curves are plotted, all passing through the origin (0,0). One curve is above the x-axis, another is below it, and a third is on the x-axis itself. These represent even powers of n.</p>	 <p>A Cartesian coordinate system with x and y axes ranging from -7 to 8. The x-axis is labeled with integers from -7 to 8. The y-axis is labeled with integers from -8 to 9. Three curves are plotted, all passing through the origin (0,0). One curve goes up to the right and down to the left. Another goes down to the right and up to the left. The third is a straight line along the x-axis. These represent odd powers of n.</p>		
gemeinsame Punkte				
Schnittpunkt mit der y-Achse				
Schnittpunkt mit der x-Achse				
Maximum /Minimum				

Nehmen Sie eine beliebige Funktion $f(x) = x^n$ und zeichen Sie die entsprechenden Funktionen $f(x) = a \cdot x^n$, indem Sie die Zahl a variieren!
 (z.B. $f(x) = x^5$ und $f(x) = 2x^5$ etc.)

	$a > 1$	$0 < a < 1$	$-1 < a < 0$	$a < -1$
Form (Skizze)				
Veränderung durch a				