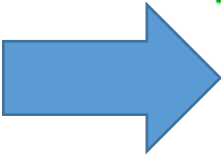

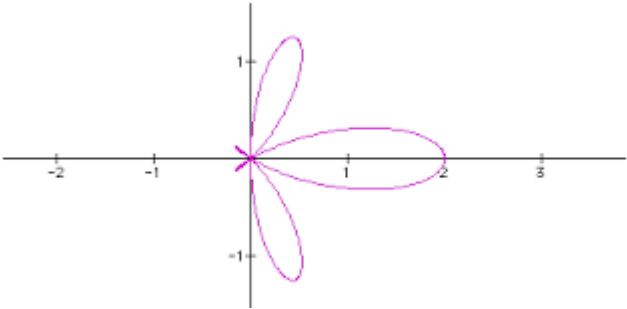


<p><b>Domain</b></p>	<p>The set of x-values for which a function is defined</p>
<p><b>Input of a function</b></p>	<p><math>f(x) = \sqrt{x+5}</math> <math>x+5 \geq 0</math>  <math>x \geq -5</math></p>
<p><b>Range</b></p>	<p>The set of all values, <math>f(x)</math>, for every x-value in the domain</p>
<p><b>Output of a function</b></p>	<p><math>f(x) = \sqrt{x+5}</math>  <math>[0, \infty)</math></p>

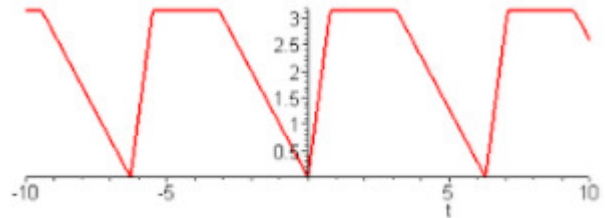
<b>Roots</b>	<b>x-intercepts</b>
<b>Zeros</b>	<b>solutions to the equation <math>f(x)=0</math></b>
<b>x-axis Symmetry</b>	<b><math>(x,y)</math> &amp; <math>(x, -y)</math> are both points on the graph</b>
<b>Fails the vertical line test</b>	

<b>Even function</b>	<b><math>(x, y)</math> &amp; <math>(-x, y)</math> are both points on the graph</b>
<b><math>f(-x) = f(x)</math></b>	<b>y-axis symmetry</b>
<b>Odd function</b>	<b><math>(x, y)</math> &amp; <math>(-x, -y)</math> are both points on the graph</b>
<b><math>f(-x) = -f(x)</math></b>	<b>Origin symmetry</b>

**Periodic function**

**A function in which the values of  $f(x)$  repeat at regular intervals**

**Trig functions are an example**



**One-to-one function**

**A function in which every element of the range corresponds to exactly one element of the domain**

**Passes the vertical and horizontal line tests**

**Inverse is also a function**

<p><b>Function</b></p>	<p><b>A relation in which every element of the domain corresponds to exactly one element of the range</b></p>
<p><b>Passes the vertical line test</b></p>	$f(x) = \sqrt{x+5}$