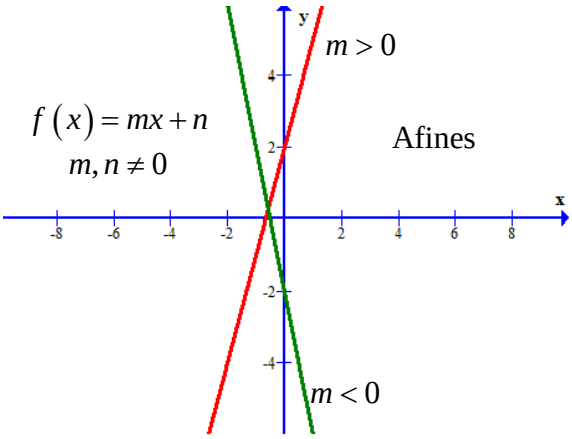
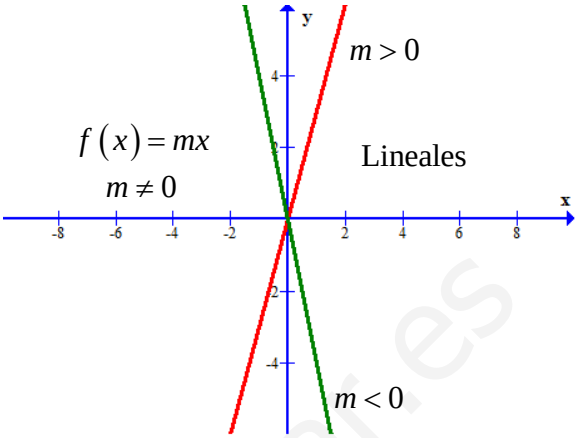
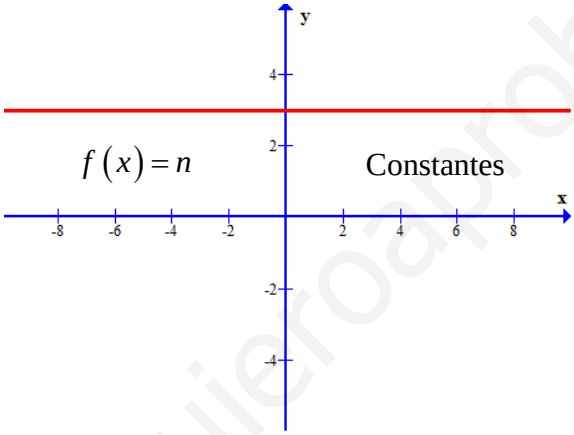
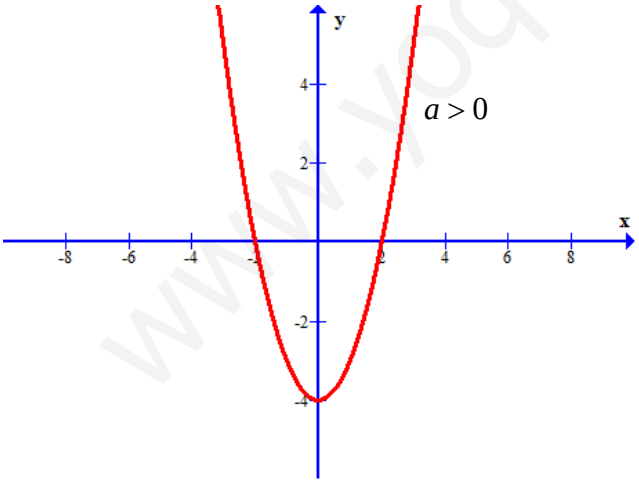
# Gráficas de algunas familias de funciones

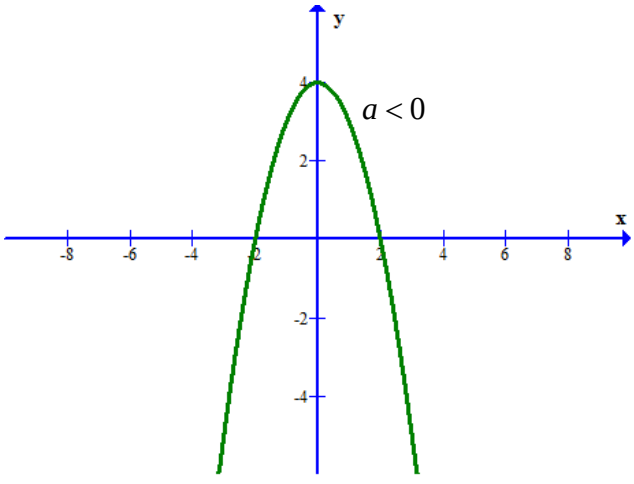
## 1. *Funciones polinómicas*



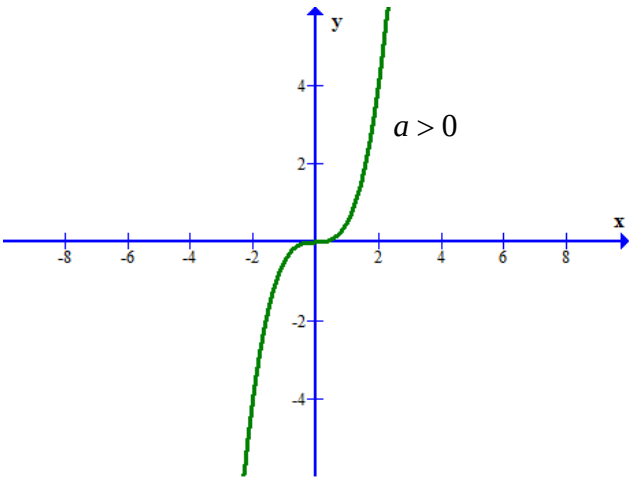



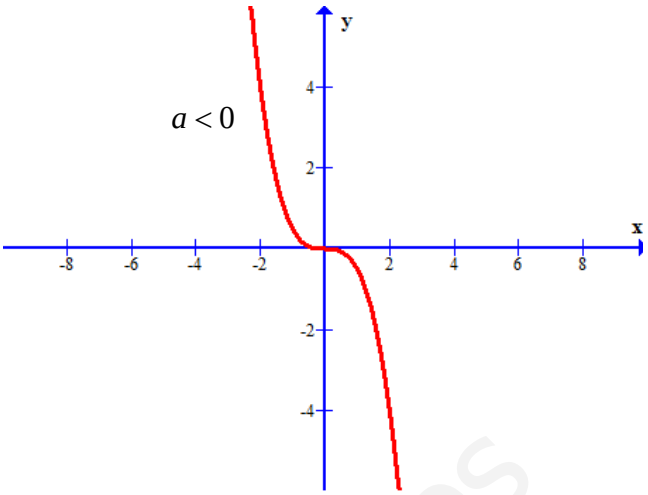



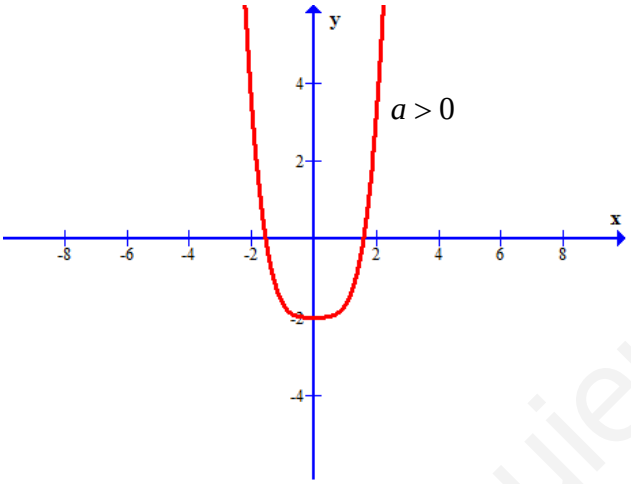



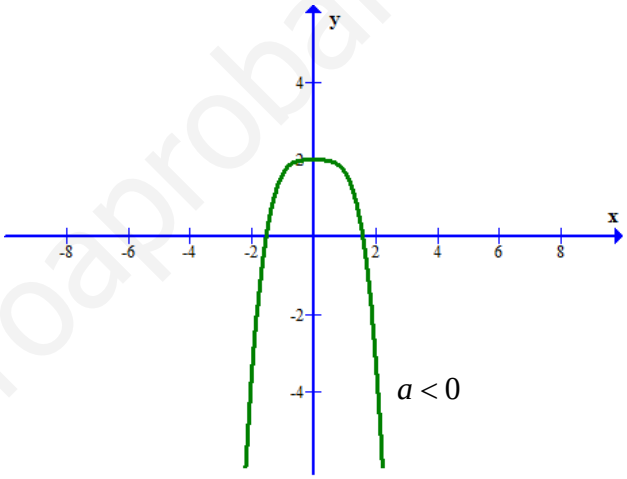

$f(x)=ax^2+bx+c$ con $a,b,c\in\mathbb{R}$ y $a\neq 0$ (funciones cuadráticas)



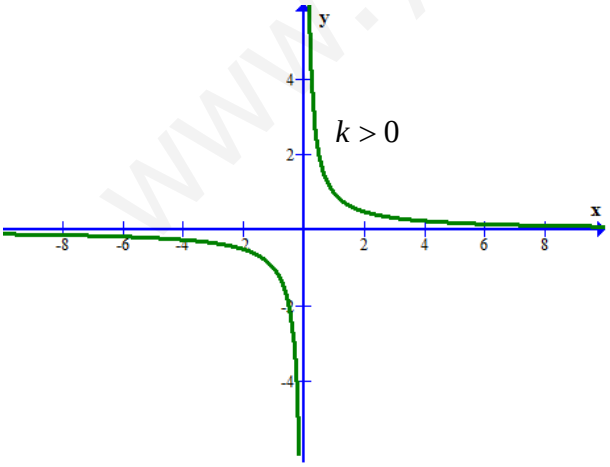

$f(x) = ax^n$ con $n =$ impar

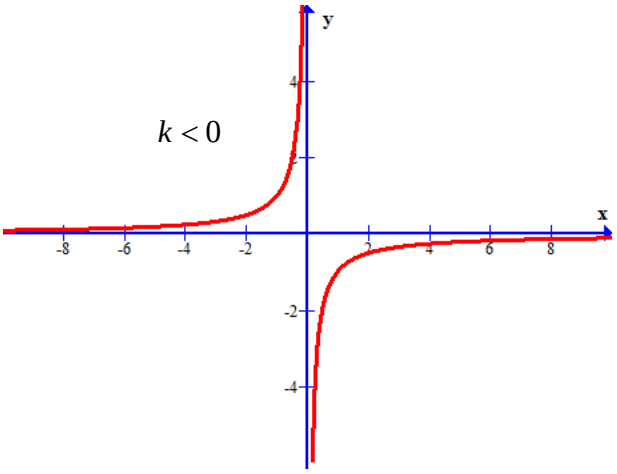


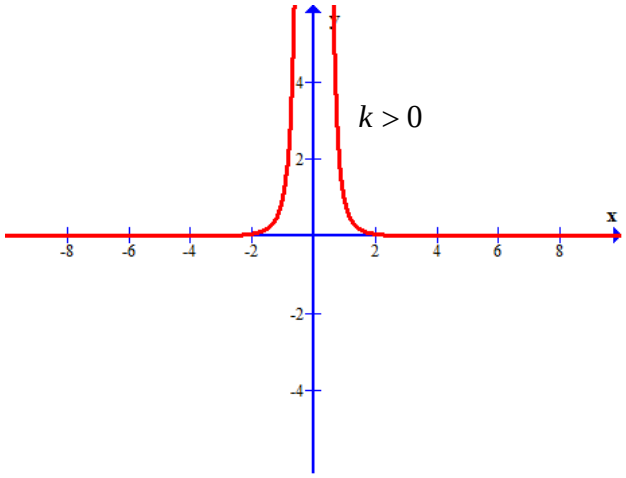

$f(x) = ax^n$ con $n =$ par

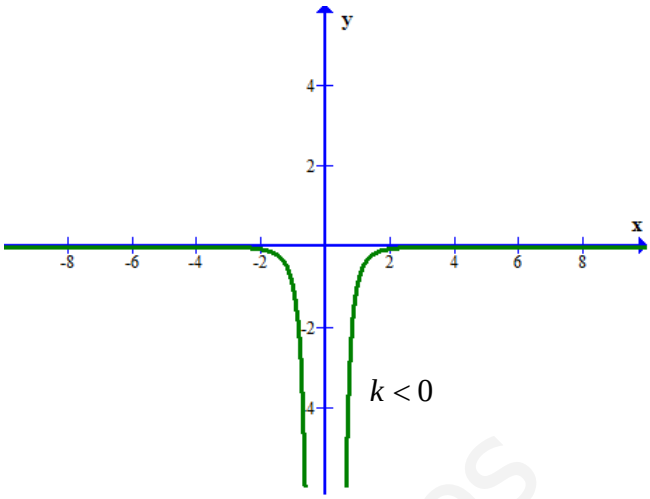
## 2. *Funciones de proporcionalidad inversa*



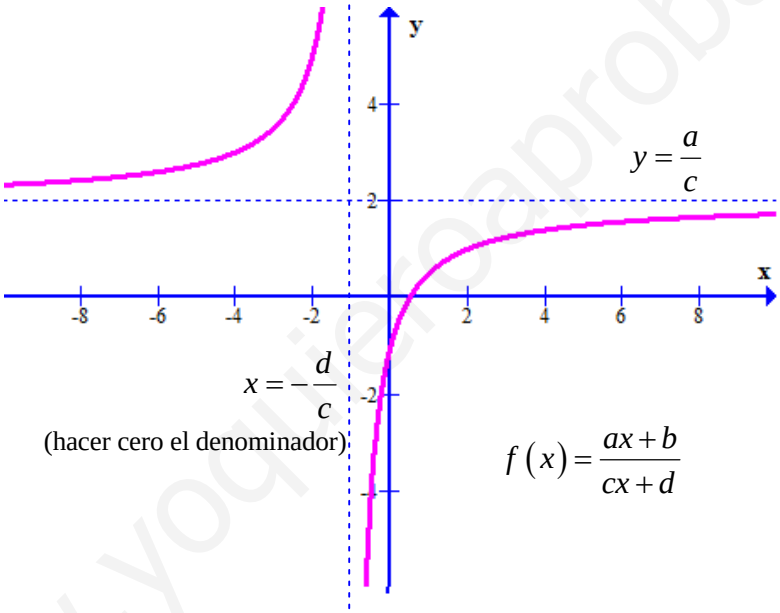




$f(x) = \dfrac{k}{x^n}$ con $n =$ impar




$$f(x)=\frac{k}{x^n} \text{ con } n=\text{par}$$

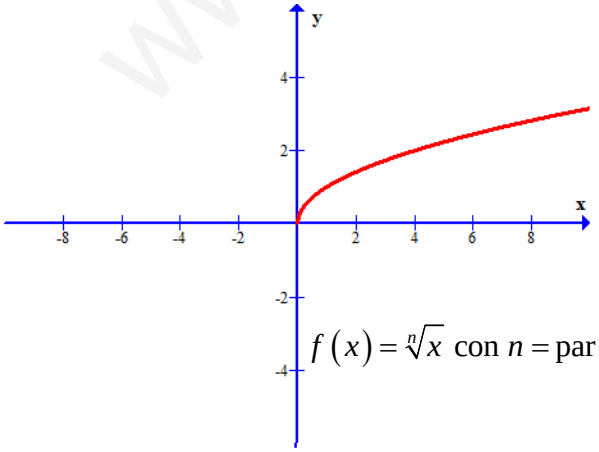



$x=-\frac{d}{c}$

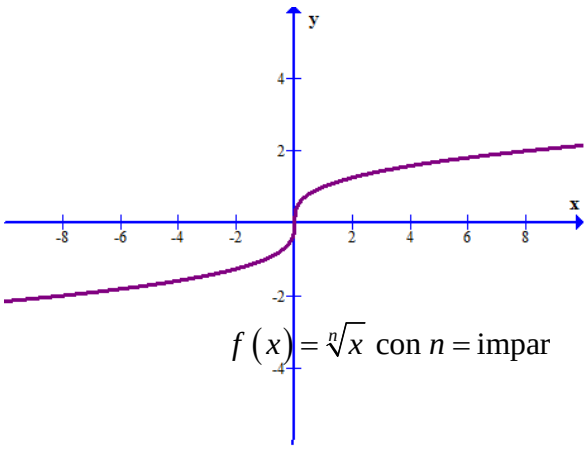
(hacer cero el denominador)

$$f(x)=\frac{ax+b}{cx+d}$$

## 3. *Funciones radicales*

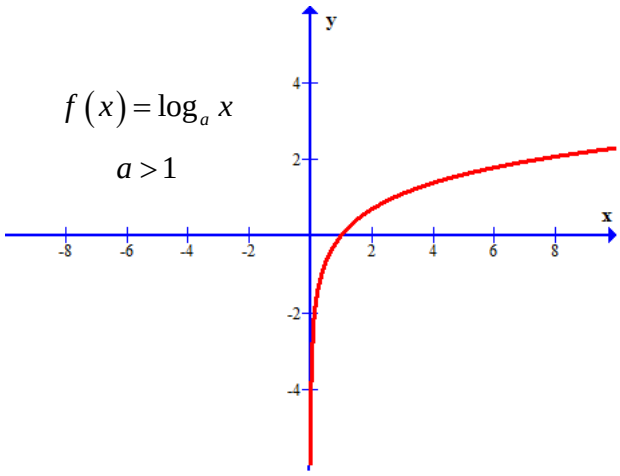


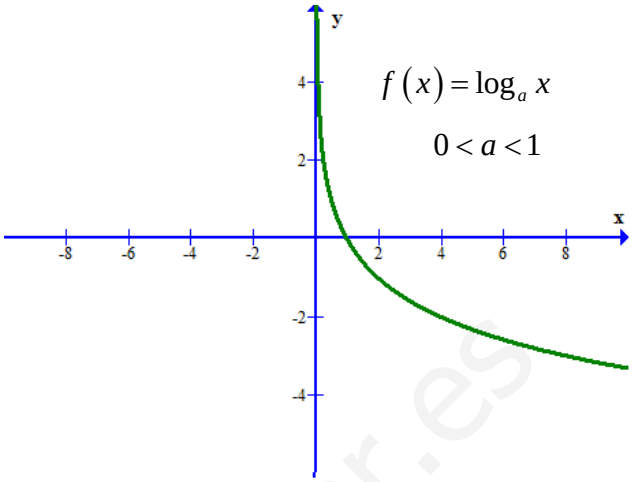

$f(x)=\sqrt[n]{x}$ con $n=$ par



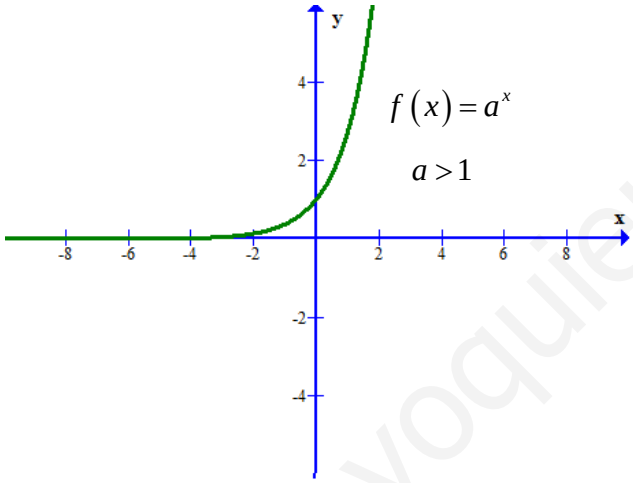

$f(x)=\sqrt[n]{x}$ con $n=$ impar

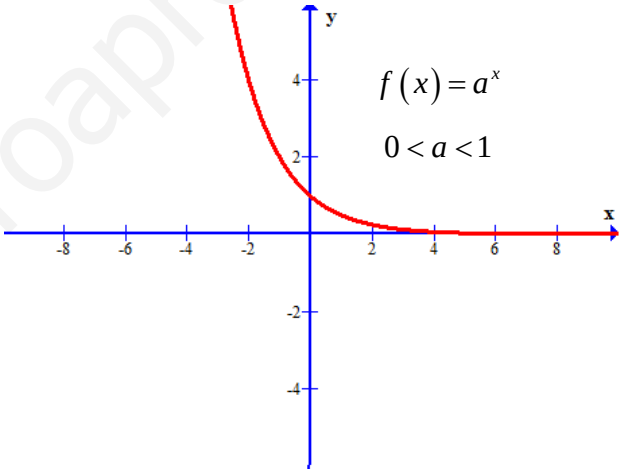
## 4. *Funciones logarítmicas*



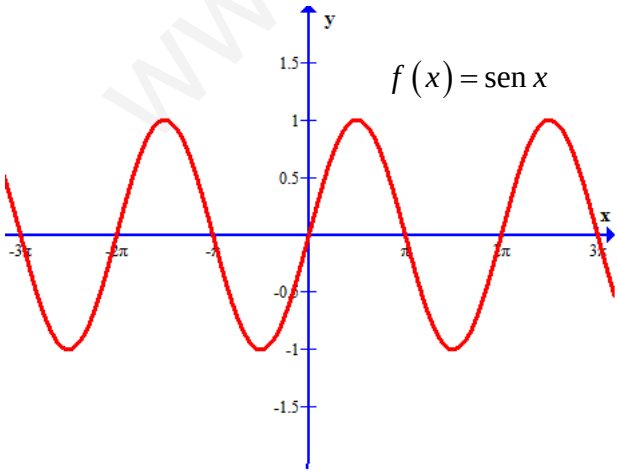



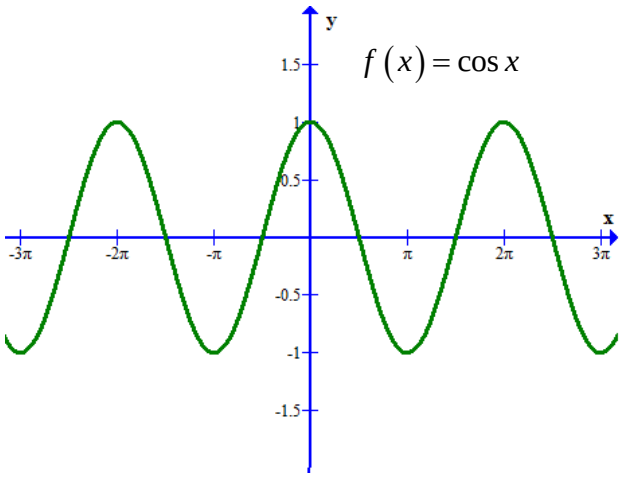

## 5. *Funciones exponenciales*

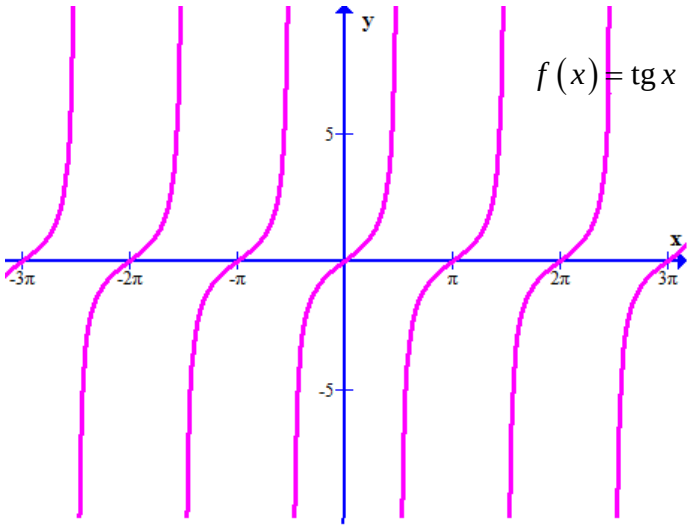


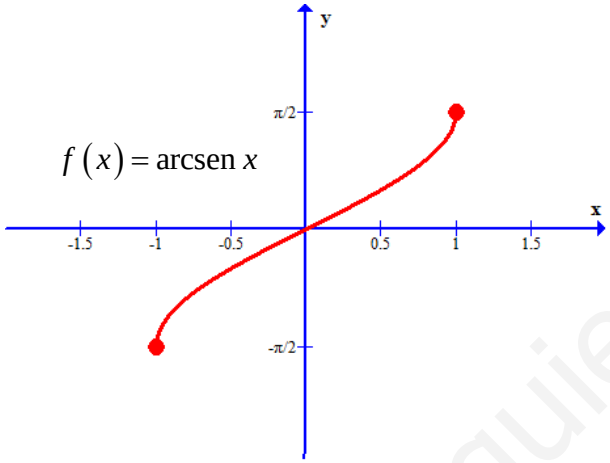

## 6. *Funciones* trigonométricas o circulares

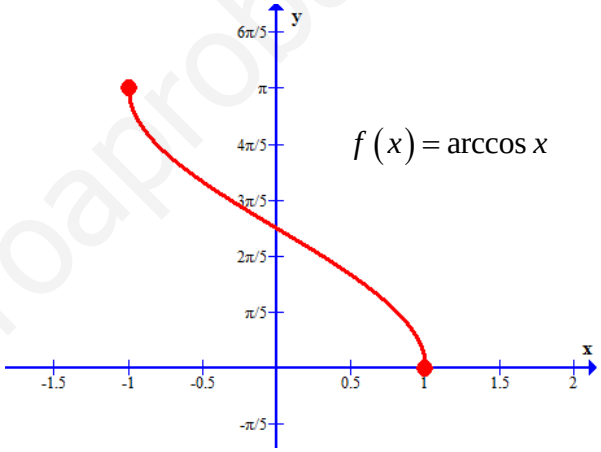


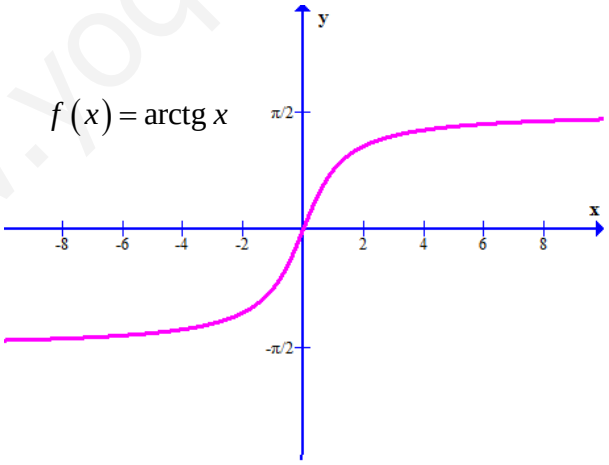






## 7. *Funciones trigonométricas inversas*




## 8. *Función valor absoluto*

$$|f(x)| = \begin{cases} f(x) & \text{si} \quad f(x) \geq 0 \\ -f(x) & \text{si} \quad f(x) < 0 \end{cases}$$

## 9. *Funciones definidas a trozos*