

## DOMINIOS Y RECORRIDOS DE ALGUNAS FUNCIONES.

Completa las tablas hallando el dominio, recorrido y la gráfica de las siguientes funciones

FUNCIONES	DOMINIOS	RECORRIDOS	GRÁFICA ASOCIADA
<b>FUNCIONES CONSTANTES</b>			
$y = 5$			
$y = 2$			
$y = 0$			
$y = -3$			
<b>FUNCIONES LINEALES</b>			
$y = x$			
$y = 2x$			
$y = 5x$			
$y = -x$			
$y = -3x$			
$y = -\frac{x}{3}$			
<b>FUNCIONES AFINES</b>			
$y = x + 5$			
$y = x - 3$			
$y = 2x + 3$			
$y = 2x - 5$			
$y = -\frac{x}{3} + 4$			
$y = -\frac{x}{3} - 3$			

**FUNCIONES CUADRÁTICAS**

$y = x^2$			
$y = 2x^2$			
$y = 5x^2$			
$y = \frac{x^2}{2}$			
$y = \frac{x^2}{5}$			
$y = -x^2$			
$y = -3x^2$			
$y = -\frac{x^2}{5}$			
$y = (x+5)^2$			
$y = (x-3)^2$			
$y = 3(x+2)^2$			
$y = \frac{(x-4)^2}{5}$			
$y = x^2 - 3x + 2$			
$y = 5x^2 + x + 2$			
$y = -\frac{x^2}{3} + 2x + 3$			

**FUNCIONES RACIONALES DEL TIPO**  $f(x) = \frac{ax+b}{cx+d}$  *con*  $c \neq 0$  *y*  $ad - bc \neq 0$

$y = \frac{1}{x}$			
$y = \frac{3}{x}$			
$y = -\frac{2}{x}$			
$y = \frac{3}{x-2}$			
$y = \frac{3+2x}{x-5}$			

### FUNCIONES EXPONENCIALES

$y = e^x$			
$y = 2^x$			
$y = 10^x$			
$y = \left(\frac{1}{2}\right)^x$			
$y = \left(\frac{1}{5}\right)^x$			
$y = -e^x$			
$y = e^x + 3$			
$y = e^x - 2$			
$y = e^{x+3}$			
$y = e^{x-5}$			

### FUNCIONES LOGARÍTMICAS

$y = \log x$			
$y = \log_2 x$			
$y = \ln x$			
$y = \log_{\frac{1}{2}} x$			
$y = \ln x + 3$			
$y = \ln x - 2$			
$y = \ln(x + 3)$			
$y = \ln(x - 2)$			

### FUNCIONES TRIGONOMÉTRICAS

$y = \text{sen } x$			
$y = \text{sen } x + 3$			
$y = \text{sen } x - 2$			
$y = \text{sen}(x + 3)$			
$y = \text{sen}(x - 2)$			
$y = 3 \text{sen } x$			
$y = \frac{\text{sen } x}{2}$			
$y = \text{cos } x$			
$y = \text{tg } x$			

$y = \cot x$			
$y = \sec x$			
$y = \csc x$			
<b>“FUNCIONES” MULTIFORMES</b>			
$y = \arcsen x$			
$y = \arccos x$			
$y = \text{arctg } x$			

<b>OTRAS FUNCIONES</b>			
$y =  x $			
$y =  x - 5 $			
$y =  x^2 - 3x + 2 $			
$y =  \ln x $			
$y =  \text{sen } x $			
$y = \text{Ent}(x)$			
$y = \text{Mant}x = x - \text{Ent}x$			
$y = \text{sg}x = \begin{cases} 1 & \text{si } x > 0 \\ -1 & \text{si } x < 0 \end{cases}$			
$y = \begin{cases} 2x & \text{si } x < -2 \\ x^2 - 5 & \text{si } -2 \leq x < 3 \\ 3 + \frac{1}{x} & \text{si } x \geq 3 \end{cases}$			
$y = e^{-x}$			
$y = \ln(-x)$			
$y = \text{sen}(-x)$			