$$f(x)=\begin{cases} 2^x & \text{si } x<0 \quad T1 \\ -x+1 & \text{si } 0<x\leq 2 \quad T2 \\ -x^2+6x-8 & \text{si } x>2 \quad T3 \end{cases}$$

**T1: FUNCIÓN EXPONENCIAL**

| x | f(x) |
|---|---|
| 0 | 1 |
| -1 | 0'5 |
| -2 | 0'3̂ |

**T2: F. AFÍN**

| x | f(x) |
|---|---|
| 0 | 1 |
| 1 | 0 |
| 2 | -1 |

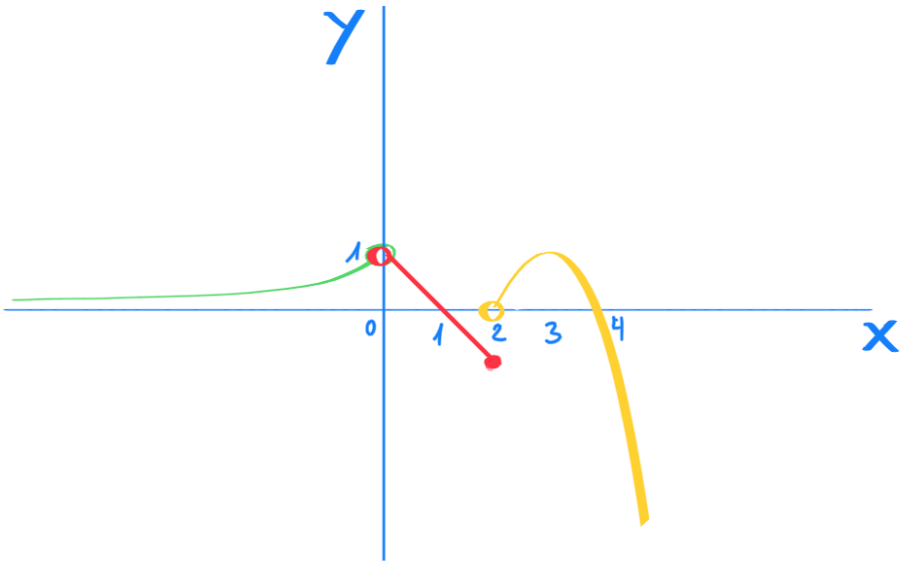
**T3: FUNCIÓN CUADRÁTICA**

VÉRTICE: $(V_x, V_y) = (3,1)$

| x | f(x) |
|---|---|
| 2 | 0 |
| 4 | 0 |

$$V_x = \frac{-b}{2a} = \frac{-6}{2\cdot(-1)} = 3$$

$$V_y = -(3)^2+6\cdot(3)-8 = -9+18-8 = 1$$



$D(f) = (-\infty, 0) \cup (0, +\infty)$

$Im(f) = (-\infty, 1]$

MONOTONÍA:

CRECIENTE: $(-\infty, 0) \cup (2, 3)$

DECRECIENTE: $(0, 2) \cup (3, +\infty)$

MÁXIMO ABSOLUTO: $M(3, 1)$