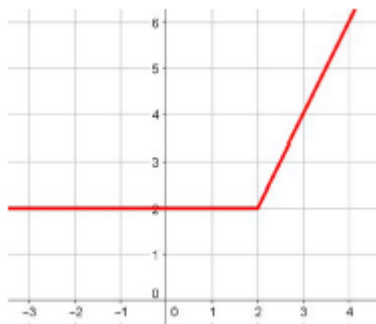


MATEMÁTICAS -II

SOLUCIONES A LOS EJERCICIOS DEL TEMA 11. GRÁFICAS

Páginas 296, 297 y 298

2.- a) $f(x) = \begin{cases} 2 & \text{Si } x \leq 2 \\ 2x - 2 & \text{Si } x > 2 \end{cases}$



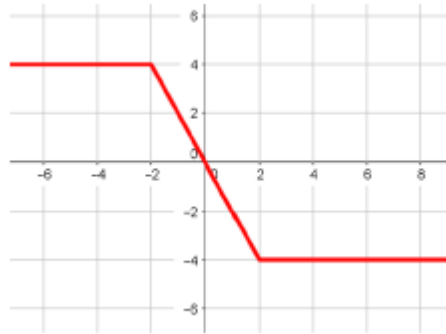
b) $f(x) = \begin{cases} -1 & \text{Si } x < 2 \\ 1 & \text{Si } x \geq 2 \end{cases}$



c) $f(x) = \begin{cases} x^2 - 5x + 4 & \text{Si } x \leq 1 \\ -x^2 + 5x - 4 & \text{Si } 1 < x \leq 4 \\ x^2 - 5x + 4 & \text{Si } x > 4 \end{cases}$



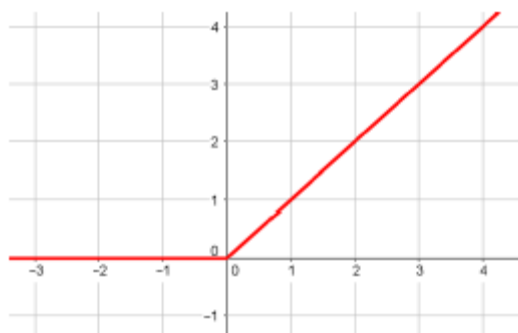
d) $f(x) = \begin{cases} 4 & \text{Si } x \leq -2 \\ -2x & \text{Si } -2 < x \leq 2 \\ -4 & \text{Si } x \geq 2 \end{cases}$



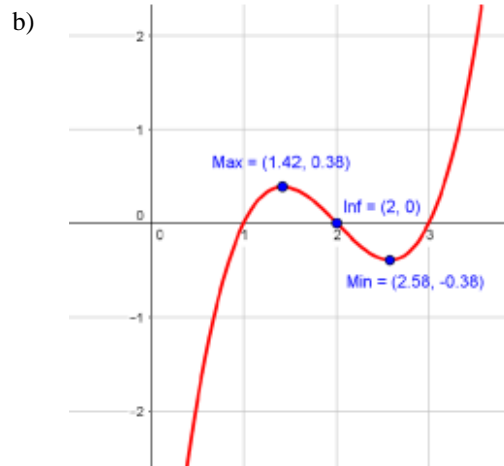
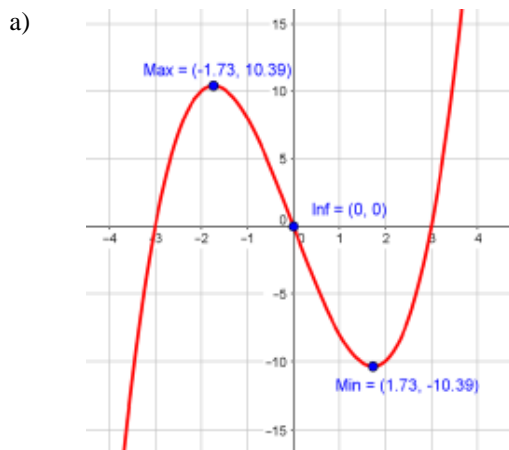
e) $f(x) = \begin{cases} x^3 + 3x & \text{Si } x \leq 0 \\ x^3 - 3x & \text{Si } x > 0 \end{cases}$



f) $f(x) = \begin{cases} 0 & \text{Si } x \leq 0 \\ x & \text{Si } x > 0 \end{cases}$



3.-



c)



4.-

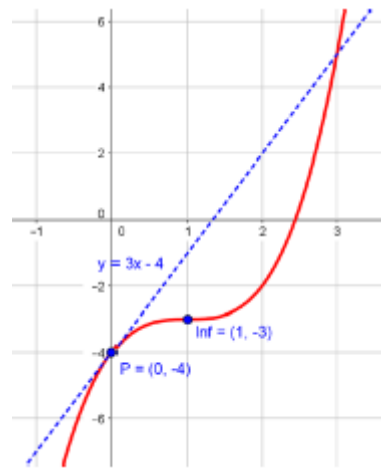
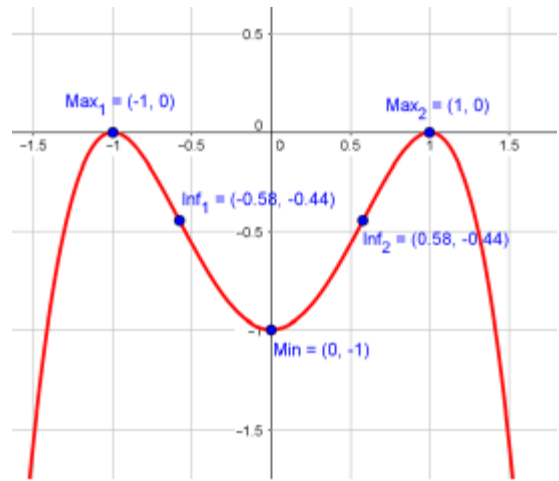
4.- Poniendo las condiciones obtenemos;
 $b=-3$; $c=3$; $d=-4$

y la función quedará:

$$f(x) = x^3 - 3x^2 + 3x - 4.$$

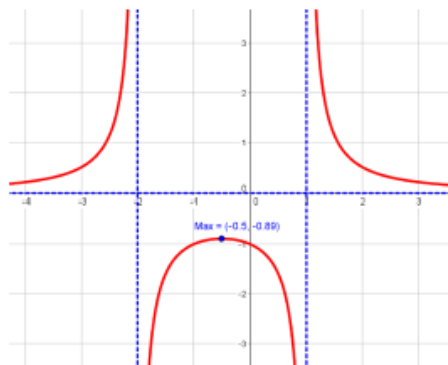
La gráfica será como la siguiente:

f)

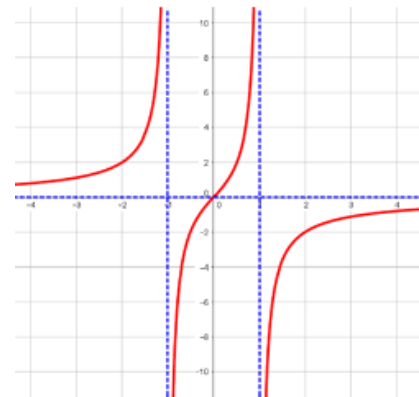


5.-

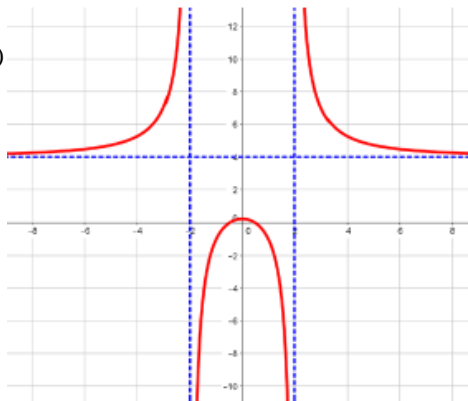
a)



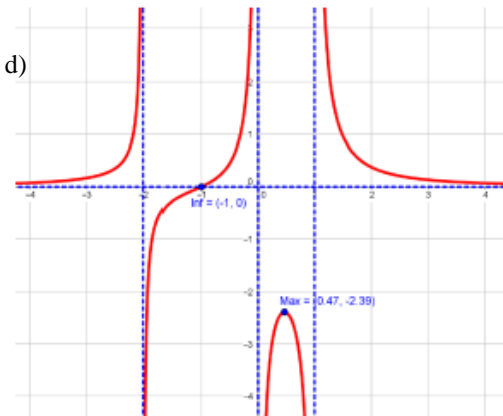
b)

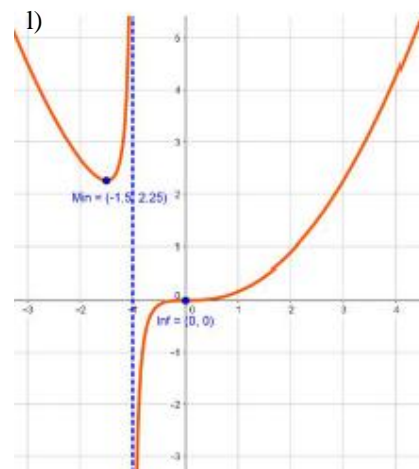
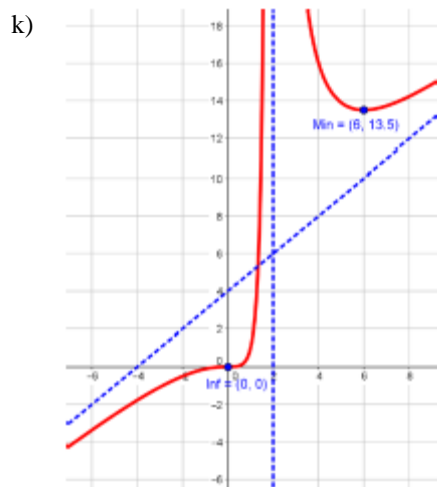
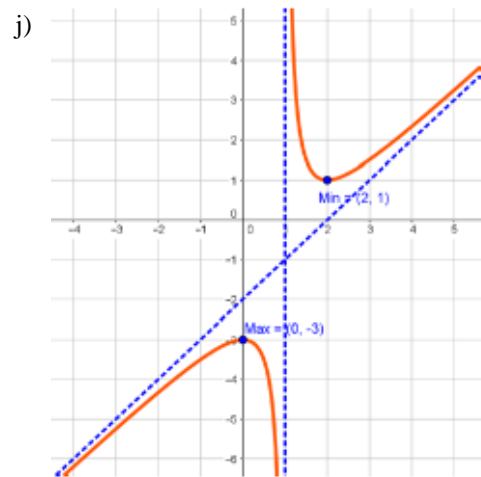
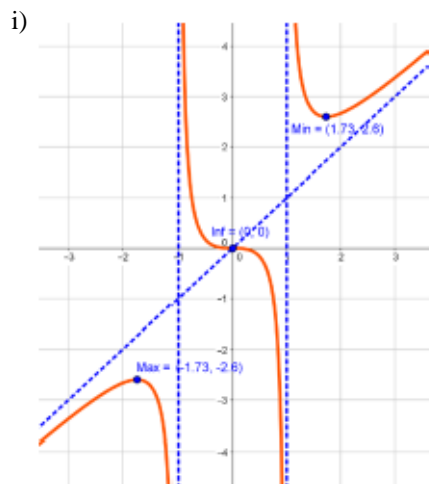
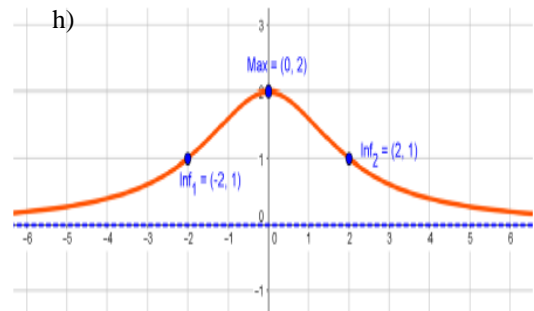
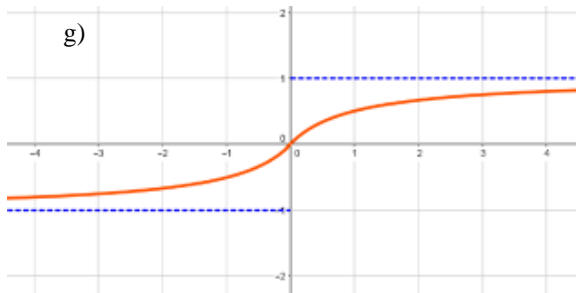
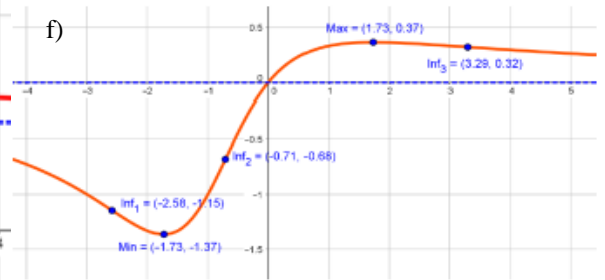
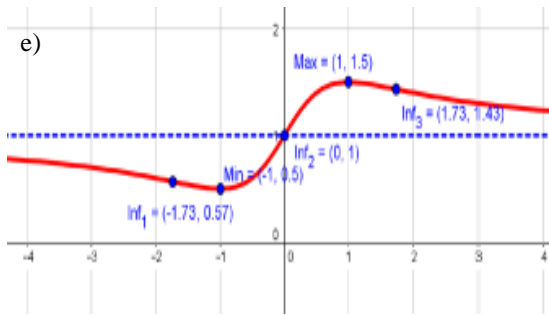


c)



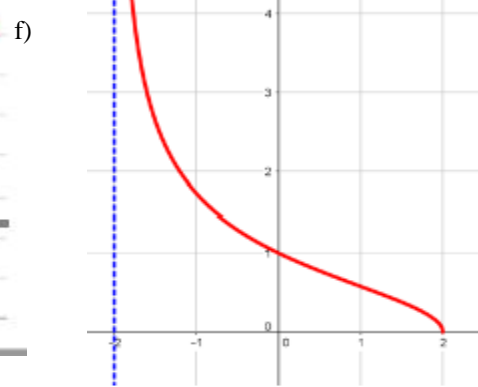
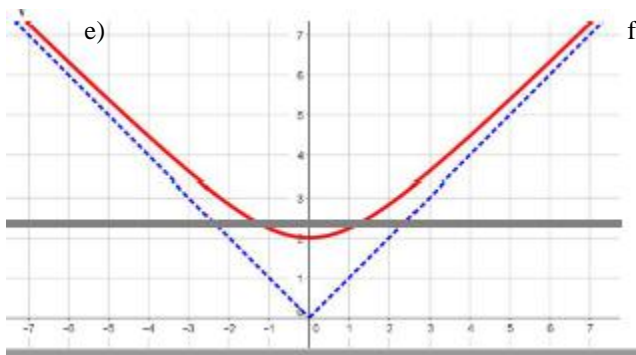
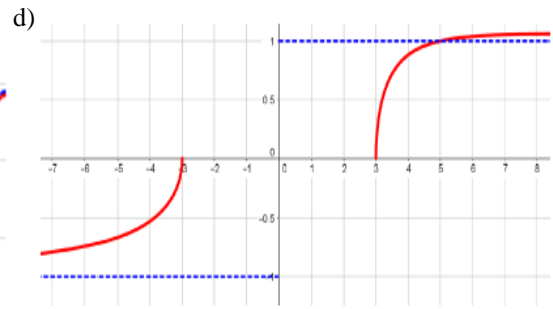
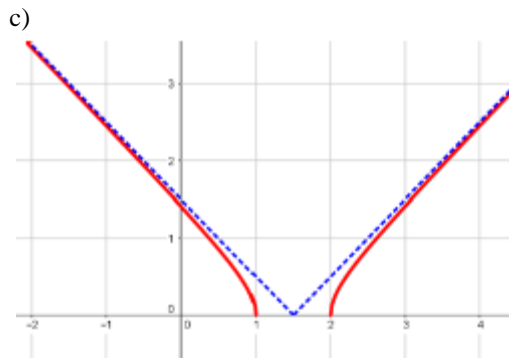
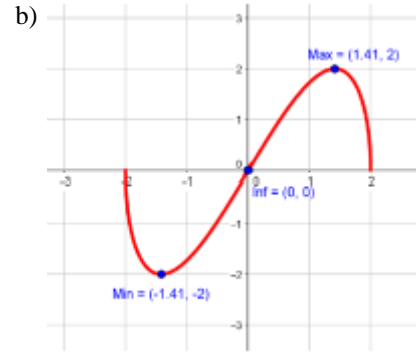
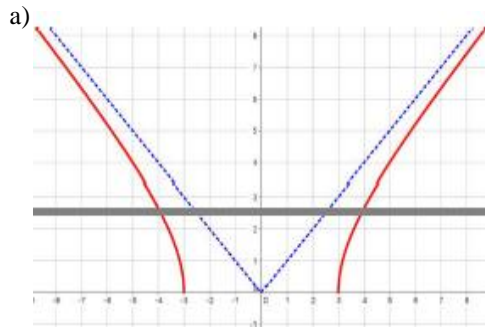
d)





6.- Tiene que ser $k=-1$ y la gráfica corta a la asíntota en el punto $P(2/3, 8/3)$

7.-



8.-

