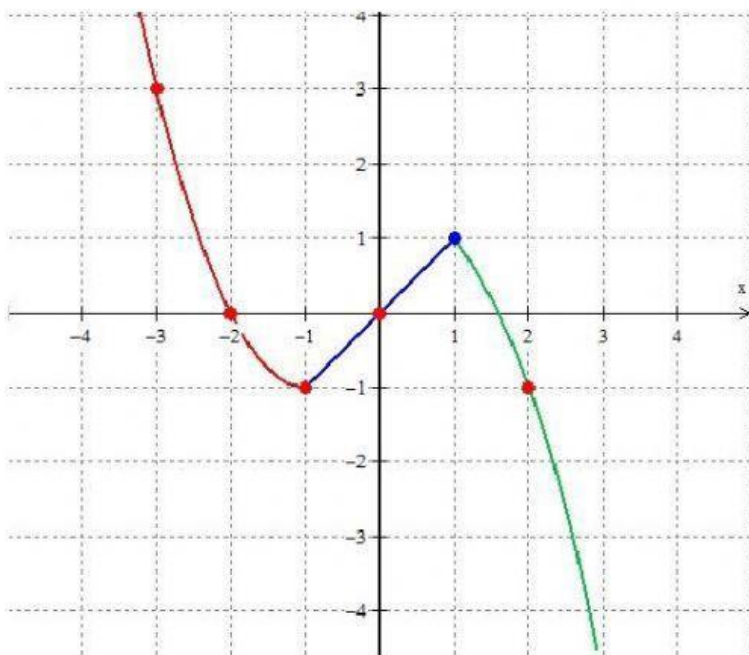


Funciones – Primer Parcial

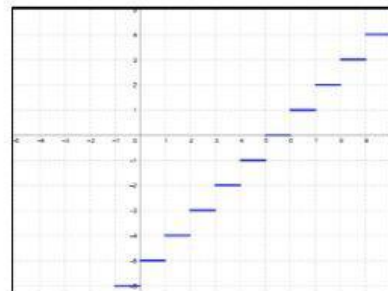
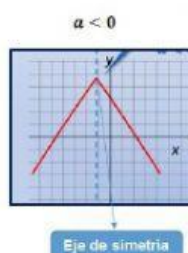
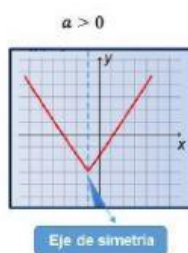
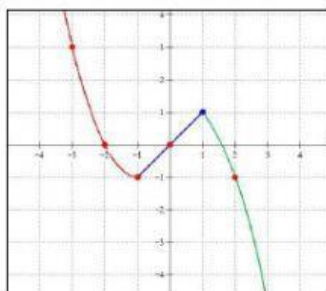
1. Analice la pregunta y escoja la respuesta correcta.

1.1. En la siguiente función $f(x) = (-3)^x$

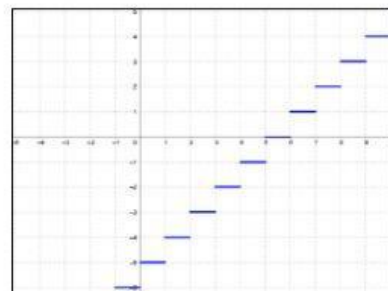
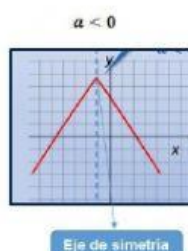
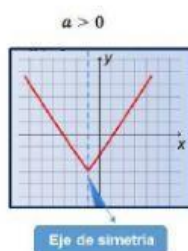
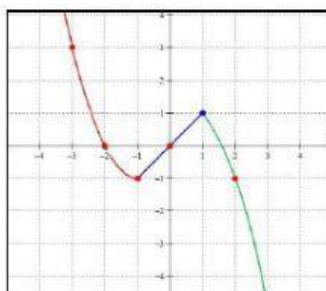


- A. 3
- B. -1
- C. $-\infty$

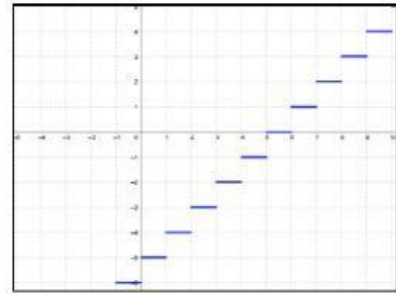
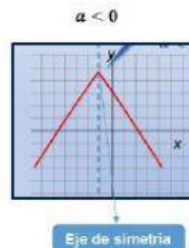
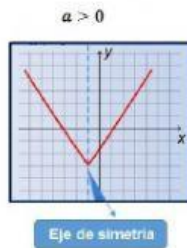
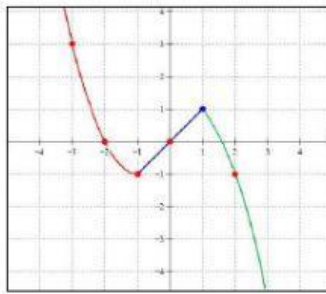
2. Escoja la gráfica de la siguiente de la función entero mayor:



3. Escoja la gráfica de la siguiente de la función valor absoluto



4. Escoja la gráfica de la siguiente de la función por partes:



5. Escoja la función inversa de: $f(x) = \sqrt{x} + 3$

A. $f^{-1}(x) = x^2 + 9$

B. $f^{-1}(x) = x^2 + 3$

C. $f^{-1}(x) = (x - 3)^2$

D. $f^{-1}(x) = (x + 3)^2$

6. Escoja la función inversa de: $f(x) = \sqrt{x - 3}$

A. $f^{-1}(x) = x^2 + 9$

B. $f^{-1}(x) = x^2 + 3$

C. $f^{-1}(x) = (x - 3)^2$

D. $f^{-1}(x) = (x + 3)^2$

Dadas las siguientes funciones $f(x) = \sqrt{x} - 3$ $g(x) = \frac{1}{x}$ $h(x) = x^2$ hallar:

7. Hallar: $(g - f + h)(x) = ?$

A. $x^2 + \sqrt{x} + \frac{1}{x} - 3$

B. $x^2 - \sqrt{x} + \frac{1}{x} - 3$

C. $x^2 - \sqrt{x} + \frac{1}{x} + 3$

D. Ninguno

8. $(f - g)(0) = ?$

A. -3

B. -4

C. No definido

D. Ninguna

9. Hallar: $(g \cdot h)(x) = ?$

A. x

B. $\frac{1}{x}$

C. x^3

D. *ninguna*

10. Hallar: $(f/h)(x) = ?$

A. $\frac{\sqrt{x}-3}{x^2}$

B. $\frac{\sqrt{x-3}}{x^2}$

C. $\frac{\sqrt{x}-3}{x}$

D. $\frac{\sqrt{x}+3}{x^2}$