



Cálculo de Dominios:

1. $\left\{ \begin{array}{l} f(x) \text{ polinomio de exponentes positivos y no fraccionarios.} \\ a^{f(x)} \text{ -----} \end{array} \right\} D = (-\infty, \infty) \quad D = \forall x \in \mathfrak{R}$

2. $y = \frac{f(x)}{g(x)}$
Igualamos el denominador a cero y resolvemos.
 $g(x) = 0 \quad x_1 = a; \quad x_2 = b \quad \left\} \quad D = \forall x \in \mathfrak{R} - \{x = a; \quad x = b\}$

3. $y = \sqrt[n]{f(x)}$
 $n = \text{par} \quad \left\{ \begin{array}{l} f(x) \geq 0 \\ \text{Resolvemos } x \geq a \end{array} \right\} \quad D = [a, \infty) \text{ solución por intervalos.}$
 $n = \text{impar} \rightarrow \text{-----} \quad \left\} \quad D = \mathfrak{R}$

4. $y = \frac{\sqrt{f(x)}}{g(x)} \quad \left\{ \begin{array}{l} \text{casos 2. y 3. simultáneos.} \\ \underline{\text{Si}} \quad f(x) \geq 0 \\ \underline{\text{No}} \quad g(x) = 0 \end{array} \right\} \text{Resolvemos} \quad \left. \right\} \text{solución por intervalos.}$

5. $y = \frac{f(x)}{\sqrt{g(x)}} \quad \left\{ \begin{array}{l} g(x) > 0 \quad \underline{\text{Si}} \\ \text{Resolvemos } x > a \end{array} \right\} \quad D = (a, \infty)$

6. $y = \sqrt{\frac{f(x)}{g(x)}} \quad \left\{ \begin{array}{l} \text{Si } \frac{f(x)}{g(x)} \geq 0 \quad \left\{ \begin{array}{l} \left\{ \begin{array}{l} f(x) \leq 0 \\ g(x) < 0 \end{array} \right\} = - = + \\ \left\{ \begin{array}{l} f(x) \geq 0 \\ g(x) > 0 \end{array} \right\} = + = + \end{array} \right. \end{array} \right\} \left\{ \begin{array}{l} f(x) = 0 \quad x = a \quad [\bullet] \\ g(x) = 0 \quad x = b \quad (o) \end{array} \right\} \quad D = (-\infty, a] \cup (b, \infty)$

7. $y = \log_a f(x) \quad \left\{ \begin{array}{l} \text{Si } f(x) > 0 \\ \text{Resolvemos } x > a \end{array} \right\} \quad D = (a, \infty)$