

EJERCICIO MIBE3370:

"achivages.com"

Resolver el sistema:

$$\begin{cases} 5^{x+y} = 25^3 \\ 5^{x-y} = 25 \end{cases}$$

$$\begin{cases} 5^{x+y} = (5^2)^3 \\ 5^{x-y} = 5^2 \end{cases} \Rightarrow \begin{cases} 5^{\boxed{x+y}} = 5^{\boxed{6}} \\ 5^{\boxed{x-y}} = 5^{\boxed{2}} \end{cases}$$

$$\textcolor{red}{(+)} \quad \boxed{\begin{cases} x+y = 6 \\ x-y = 2 \end{cases}}$$

$$2x = 8 \Rightarrow x = 4$$

$$\textcolor{red}{(-)} \quad \begin{cases} x+y = 6 \\ x-y = 2 \end{cases}$$

$$2y = 4 \Rightarrow y = 2$$

$$\boxed{\begin{cases} x = 4 \\ y = 2 \end{cases}}$$