

Answer on Question #70050 – Math – Calculus

Question

Find the area bounded by $a^2 x^2 = a^2 x^2 - x^4$.

Solution

$$\begin{aligned}a^2 x^2 &= a^2 x^2 - x^4 \\a^2 x^2 - a^2 x^2 &= -x^4 \\0 &= -x^4 \\x &= 0\end{aligned}$$

The locus defined by this equation is a *single line* $x = 0$. This line doesn't bind any area.

Answer: 0.