RADICACIÓN

Problema 54:

Simplifica:

$$\frac{\sqrt[n]{x^{2n}}}{x} + (x^{n^2-1})^{\frac{n}{n-1}} \div x + x^{n^2+n}$$

Solución Problema 54:

$$\frac{\sqrt[n]{x^{2n}}}{x} + (x^{n^2-1})^{\frac{n}{n-1}} \div x + x^{n^2+n} = \frac{\frac{\sqrt[n]{x^{2n}}}{x} + (x^{n^2-1})^{\frac{n}{n-1}}}{x + x^{n^2+n}} = \frac{\frac{x^{2n/n}}{x} + x^{\frac{(n^2-1)\cdot n}{n-1}}}{x + x^{n^2+n}} =$$

$$= \frac{\frac{x^{2n/n}}{x} + x^{\frac{(n+1)\cdot(n-1)\cdot n}{n-1}}}{x + x^{n^2+n}} = \frac{\frac{x^2}{x} + x^{(n+1)\cdot n}}{x + x^{n^2+n}} = \frac{x + x^{n^2+n}}{x + x^{n^2+n}} = 1$$