

Problem Set

Let x, y be numbers ($x, y \neq 0$). Simplify each of the following expressions.

1. $\frac{y^{12}}{y^{12}} =$	2. $9^{15} \cdot \frac{1}{9^{15}} =$
3. $(7(123456.789)^4)^0 =$	4. $2^2 \cdot \frac{1}{2^5} \cdot 2^5 \cdot \frac{1}{2^2} = \frac{2^2}{2^2} \cdot \frac{2^5}{2^5}$
5. $\frac{x^{41}}{y^{15}} \cdot \frac{y^{15}}{x^{41}} = \frac{x^{41} \cdot y^{15}}{y^{15} \cdot x^{41}}$	