X^a Exponents work sheet

By Ms. Nooch

Name _____ Class _____ No. _____

Simplification

1. $a^x \cdot a^y \cdot a^z$ = _____

2. $\frac{3^x}{27^y}$ = _____

3. $\frac{(x^2y^2)}{(y^{-3}z)^3}$ = _____

4. $2^x + 2^x + 2^x + 2^x$ = _____

5. $\frac{x^{a^2}}{(x^a)^2}$ = _____

2. What is the value of $((2^{-1} - 2)^2)^{-1}$?

3. If 4x - 2y = 5, What is the value of $\frac{16^{2x}}{4^{2y}}$?

4. If p, q and r are positive integers such that x = $p^{\frac{q}{2}}$ and y = p^r, then x^2y = ?

5. If a^{-4} = 16 then a = ?

LIVEWORKSHEETS