Name_____ Date_____

Power of a Power

Write as a single power.

1. $(5^3)^2 = 5$

2. $(2^3)^4$

3. $(3^4)^6$

4. $(1^3)^{13}$

5. $(15^9)^0$

6. $(2^{-3})^3$

7. $(1^{-3})^2$

8. $(-4^3)^5$

9. $(3^{-5})^4$

10. $(2^{-3})^{-1}$

11. $(3^{-4})^{-3}$

12. $(2^3)^3(2^9)$

13. $(2^3 \times 2^9)^2$

14. $(2y^4)^7$

15. $(a^m)^n$

What do you notice? What do you wonder?

Do you have any conjectures?