Power of a Product

**Number**

**Unit 3 Line Master 8**

Simplify each expression.

1. $(1×4)^{4}=1^{}×4^{}$
2. $(2×5)^{3}$
3. $(5×3)^{2}$
4. $(3×4)^{5}$
5. $(10^{3}∙4^{2})^{1}$
6. $(5^{2}∙3^{1})^{3}$
7. $\left(3^{2}×2^{3}\right)^{3}$
8. $\left(7^{2}×5^{3}\right)^{8}$
9. $\left(2^{2}×3^{5}\right)^{0}$
10. $((-8)^{6}∙(-2)^{-3})^{4}$
11. $(3^{2}∙3^{1})^{2}$
12. $-\left(2^{2}×2^{5}\right)^{3}$
13. $\left(5^{5}×5^{3}\right)^{4}$
14. $\left(1^{2}×1^{5}\right)^{10}$
15. $\left(3x\right)^{6}$
16. $\left(ab\right)^{m}$

What do you notice? What do you wonder?

Do you have any conjectures?