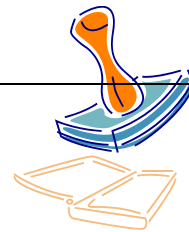


PROPERTIES OF EXPONENTS – Day 2



Expand each expression.

1) $(x^3)^5 =$

2) $(2x^4)^3 =$

Property of Exponents: To raise a power to a power, multiply the exponents; or “stamp it out.”

*For every nonzero number b , $(b^m)^n = b^{mn}$.

Simplify each expression.

3) $(x^2)^4 =$

4) $(2a^{\frac{2}{3}})^2 =$

5) $(a^4)^2(a^2)^3 =$

6) $4t^2(-2t^3)^3 =$

7) $(6mn)^2(m^3)^2 =$

8) $\frac{(3a^2b)^3}{3ab^{\frac{1}{2}}} =$

9) Find the volume of a cube that has side length $3x^3$.