Today's Learning Target:

7-4 More Multiplication Properties

* I CAN **multiply a power to another power**

* I CAN **multiply a product to a power**

Power of a Power

$(x^2)^3 = x^{2 \cdot 3}$

$(2^3)^2$

$(z^2)^4$

$(x^8)^3$

One base... _____

Parenthesis = _____

$(x^2)^3$

$(n^5)^2$

$(3^{-6})^4$

Power of a Product

$$(xy)^3 = x^3 \bullet y^3$$

$(5x)^2$ $(6 \bullet 5)^2$

$(-2w)^2$ $(3x^2y)^3$

_____ property

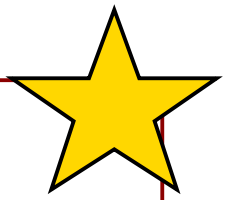
Parenthesis = _____

$(6x)^2$

$(4x^{-1})^3$

$(5x^2y)^3$

Simplified Expressions:
- have reduced fractions
- have positive exponents only
- each variable appears only once
- do not have parenthesis ( )



You try some...

$x^2 \cdot x^3$

$(2^4)^2$

$(xyz)^5$

$[(-1)^3]^2$

$x^2 \cdot x^3 \cdot x$

$(-x^2)^3$

$(r^8)^3$

$(-ab)^3$

$(2x^4)^2$

No Parenthesis, _____

Yes Parenthesis, _____