

Multiplying Monomials

What is a monomial? _____

Product of PowersFor any number a and all integers m and n , $a^m \cdot a^n = a^{m+n}$

Rule (in English): What do you do with the coefficients? _____

What do you do with the bases? _____

What do you do with the powers? _____

Examples:

1. $x^2 \cdot x^4$	2. $n^3 \cdot n^4$	3. $a(a)$
4. $(-b)(-b)$	5. $x(-x^2)$	6. $2(2^3)(2^4)$
7. $5^2(-5^2)(5^3)$	8. $(-3a^2b)(ab)(-2ab)$	9. $(2x)(3x^4)(-6x^3)$
10. $-1(2x^3)(-x)$	11. $10^5 \cdot 10^8 \cdot 10$	12. $(3x^6)(5x^2)$
13. $(-4a^3b)(3a^2b^2)$	14. $\left(\frac{1}{2}x^5y^2\right)(-10xy)$	15. $\frac{1}{4}(8mn^2)(-3m^3n)$