

Name _____

Date _____ Pd. _____

Notes: Multiplying Monomials

Exponent	
Power	
Term or "monomial"	

$$(3x^2)(5x^3) =$$

Multiply Monomials A _____ is a number, a variable, or a product of a number and one or more variables. An expression of the form x^n is called a _____ and represents the product you obtain when x is used as a factor n times. To multiply two powers that have the same base, ____ the exponents.

Product of Powers	For any number a and all integers m and n , $a^m \cdot a^n =$
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Example 1

Simplify $(3x^6)(5x^2)$.

Example 2

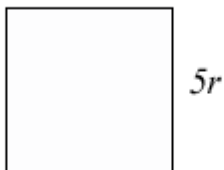
Simplify $(-4a^3b)(3a^2b^5)$.

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Exit Card: Multiplying Monomials

Look at the square below:



Which of the expressions below represents the area of the square?

- A. $20r$ B. $25r$ C. $5r^2$ D. $25r^2$

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

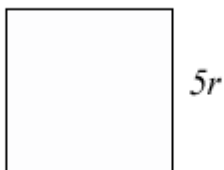
- A. $8x^3y$ B. $8x^{12}y^4$ C. $16x^7y^5$ D. $16x^{12}y^4$

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Homework: Pages 413 – 415 (15 – 27 odd)

15. Is 12 a monomial? Explain.	17. Is $a - 2b$ a monomial? Explain.
19. Is $\frac{x}{y^2}$ a monomial? Explain.	21. Simplify $(ab^4)(ab^2)$.
23. Simplify $(-7c^3d^4)(4cd^3)$	25. Simplify $(5a^2b^3c^4)(6a^3b^4c^2)$
27. Simplify $(9pq^7)^2$	