

Starter

31 JAN 2018

Multiply and simplify.

1) $\underline{3x^2} * \underline{4x^4}$
 $X \cdot X \cdot X \cdot X \cdot X \cdot X$
 $12x^6$

2) $-2y^5 (-3y)$
 $6y^6$

one

Product of MonomialsMonomial—One term—A number, a variable, or the product of numbers and variables.Examples: 3, x, x^2y , $-4xy^3$ Not a monomial: $\frac{3}{x}$, $4x^{-2}$, $3x+y$, $4-y$

many

Polynomial—many terms—A monomial or the sum of monomials

Examples:

$x+3$; $2x^2+3x+4$
 binomial trinomial

sum - means add

difference - means subtract

product - means multiply

quotient - means divide

Multiplying monomials by polynomials

To multiply a monomial by a polynomial, multiply the monomial by each term in the polynomial using the procedure for multiplication of exponents. Think **distributive property!**

IDO: $-3x(4x^2 - 6x + 2)$

$$-12x^3 + 18x^2 - 6x$$

$$\begin{aligned} & -3x^1 \cdot 4x^2 \\ & -3x^1 \cdot -6x^1 \\ & -3x \cdot 2 \end{aligned}$$