Starter 10 JAN 2017

Simplify the following.

1) $(2x^2y^5)(4xy^3)$

$2x \cdot x \cdot y \cdot y \cdot y \cdot y \cdot y$ $y \cdot y \cdot y$ $y \cdot y \cdot y$ $x \cdot x$

$(2x^2y^5)(4xy^3) = 32x^4y^{11}$

$32x^4y^{11}$

2) $(x-4)(3x+5)$ Distributive

$1x \cdot 3x$

$3x^2 + 5x - 12x - 20$

$3x^2 - 7x - 20$

Multiplying & Simplifying Polynomials

Example 1: $(1x+5)(x-6)$

$x^2 - 6x + 5x - 30$

$x^2 - x - 30$

$1x \cdot -6 = -6x$

Example 2: $(3n-2)(5+6n)$

$15n + 18n^2 - 10 - 12n$

$18n^2 + 3n - 10$

$3n \cdot 6n$

Example 3: $(4y+z)(y-2z)$

$4y^2 - 8yz + yz - 2z^2$

$4y^2 - 7yz - 2z^2$

$4y^2 - 2z^2 - 7yz$

Example 4: $(x+2)(x^2+3x-5)$

$x^3 + 3x^2 - 5x + 2x^2 + 6x - 10$

$x^3 + 5x^2 + x - 10$

$x^1 \cdot x^2$

Example 5: $(-2y+y^2-4y^3)(6y-3)$

$(6y-3)(-2y+1y^2-4y^3)$

$-12y^2 + 6y^3 - 24y^4 + 6y^2 - 3y + 12y^3$

$-24y^4 + 18y^3 - 15y^2 + 6y$

Homework

Homework: Multiplying Polynomials

1) $(5x-8)(2x-3)$

2) $(n+1)(n-7)$

3) $(3X-7)(X-2)$

4) $(3d-2)(-d^2-3d+2$

5) $(x-2)(x+2)$