

Polynomial Operations. Monomial, monomial by a polynomial, polynomial by a polynomial.

Day 1.

a) $6a^3b(2ab^5)=$	$12a^4b^6$	$8a^4b^6$
b) $-8xy^2(3xy) =$	$24x^3y^2$	$-24x^2y^3$
c) $(-4m^2b)(-5m^3b)=$	$20m^5b^2$	$-20m^5b^2$
d) $(-7x)(-2x)(-3x^4)=$	$-21x^4$	$-42x^6$
e) $(4a^2b)(-5ab^3)(-2a^2b^4c)=$	$40a^5b^8c$	$20a^5b^8$

Day 2.

a) $-2a^3b(a^3-2a^2b^2-6ab^3)=$	$2a^3b + 4a^5b^3 + 6a^4b^4$	$-2a^6b + 4a^5b^3 + 6a^4b^4$
b) $4y^2(y^3-5y^2+y-1) =$	$4y^5 - 20y^4 + 4y^3 - 4y^2$	$4y^3 - 4y^4 + 4y^3 - 4y$
c) $-y^3(4y^2-5y+6) =$	$-4y^5 + 5y^4 - 6y^3$	$-4y^5 - y^4 - y^3$
d) $mn^4(m^3-2m^2n+4mn^2-n^2+4)=$	$m^3n^4-2m^3n^5+4m^2n^6-mn^6+4mn^4$	$m^3-2m^3n^5+4m^2n^6-mn^6+4m^4$
e) $7x^2(x^4-3x^3-x^2+2x-5)=$	$7x^6+21x^5+7x^4-4x^3-35x^2$	$7x^6-21x^5-7x^4+4x^3-35x^2$

Day 3.

$(4x - 1)(9x - 2)=$	$36x^2 + 17x + 2$	$36x^2 - 17x + 2$
$(x + 3)(x^2 - 3x + 9)=$	$3x^3 - 3x^2 + 9x$	$x^3 + 27$
$(5x - 2)(6x^2 - 3x + 1)=$	$30x^3 - 27x^2 + 11x + 2$	$30x^3 - 3x^2 + 11x + 2$
$(a - b)(a^2 + ab + b^2)=$	$a^3 + 2a^2b + 2ab^2 - b^3$	$a^3 - b^3$
$(3x - 1)(2x^2 - 7x - 4)=$	$6x^3 - 23x^2 - 5x + 4$	$6x^3 - 23x^2 + 5x + 4$

