Algebra 1 Thursday 2-21-13 Class Notes

Homework Review: Pg. 427 # 2-24 even

② $(-5mN^3)(4m^2N^2) = \boxed{-20m^3N^5}$

④ $\left(\frac{1}{3}a^5\right)(12a) = \boxed{4a^6}$

⑥ $(-2pq^3)(5p^2q^2)(-3q^4)$

$= \boxed{30p^3q^9}$

⑧ $3ab(2a^2+3b^3)$

$\boxed{6a^3b+9ab^4}$ or $\boxed{9ab^4+6a^3b}$

quintic binomial

⑩ $-3x(x^2-4x+6)$

$\boxed{-3x^3+12x^2-18x}$

cubic, trinomial

(12) $5m^2n^3 \cdot mn^2(4m-n)$

$5m^3n^5(4m-n)$

$\boxed{20m^4n^5 - 5m^3n^6}$

9th degree binomial

---

(14) $(x+1)^2 = (x+1)(x+1)$

$x^2 + x + x + 1$

quadratic trinomial $\boxed{x^2+2x+1}$

---

(16) $(y-3)(y-5)$

$y^2 - 5y - 3y + 15$

$\boxed{y^2 - 8y + 15}$

↑ Lead coeff = 1

quadratic trinomial ⇑ 2nd degree.

(18) $(m^2 - 2mN)(3mN + N^2)$

$3m^3N + m^2N^2 - 6m^2N^2 - 2mN^3$

$\boxed{3m^3N - 5m^2N^2 - 2mN^3}$

quartic trinomial

---

(20) $(3x+4)(x^2 - 5x + 2)$

$3x^3 - 15x^2 + 6x$

$4x^2 - 20x + 8$

$\boxed{3x^3 - 11x^2 - 14x + 8}$

cubic 4-term polynomial

(22) $(-4x+6)(2x^3-x^2+1)$

$-8x^4+4x^3-4x$

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

$$\boxed{-8x^4+16x^3-6x^2-4x+6}$$

quartic, 5-term polynomial

---

(24) $(a+b)(a-b)(b-a)$

$(a^2-ab+ab-b^2)(b-a)$

$(a^2-b^2)(b-a)$

$$\boxed{a^2b-a^3-b^3+ab^2}$$

cubic, 4-term polynomial

(Ex) Find degree and name $\Rightarrow$ 16

degree 0, CONSTANT MONOMIAL