

7/1/2020

RACCOLIMENTO A FATTOR COMUNE TOTALE

8 $3x^3 + x^2$

$$3x^2y + x^4y^2$$

9 $x^5 - x^3$

$$ab^2 + a^2b$$

$$8) \quad 3x^3 + x^2 = x^2(3x + 1)$$

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

$$9) \quad x^5 - x^3 = x^3(x^2 - 1)$$

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

15 $4x^3 - 12x^2 + 6x = 2x(2x^2 - 6x + 3)$

$$14) \quad 2a^4b^3 - 3a^3b^2 + 5a^2b^4 = a^2b^2(2a^2b - 3a + 5b^2)$$

19 $x^{2n} - x^n = x^n(x^n - 1)$

20 $x^{n+2}y^2 - x^{n+1}y^{n+3}$

$$a^{2n}b^4 - a^{n+1}b^2$$

$$x^{n+2}y^2 - x^{n+1}y^{n+3} = x^{n+1}y^2(x - y^{n+1})$$

$$a^{2n}b^4 - a^{n+1}b^2 = a^{n+1}b^2(a^{n-1} - 1)$$

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

34 $3a(a + b) - x(a + b)$

35 $(2a + b)^2 - (2a + b)$

34 $3a(a+b) - x(a+b) = (a+b)(3a-x)$

35 $(2a+b)^2 - (2a+b) = (2a+b)[(2a+b)-1] =$
 $= (2a+b)(2a+b-1)$

37 $(a + 1)(a^2 + 1) - (a - 1)(a^2 + 1) =$

$$= (a^2 + 1)[(a + 1) - (a - 1)] =$$

$$= (a^2 + 1)(\cancel{a} + 1 - \cancel{a} + 1) = 2(a^2 + 1)$$