

19/11/2019

$$\begin{aligned} 433 \quad & (-0,6a^4b^5) : \left(\frac{1}{3}a^2b^2\right)^2 + \left[(-\cancel{2}^1a^2b) \cdot \left(\frac{1}{\cancel{4}^2}ab^2\right) - (-0,25a^5b^6) : \left(-\frac{1}{2}a^2b^3\right)\right]^2 : (0,2a^6b^5) = \\ & = \left(-\frac{2}{3}a^4b^5\right) : \left(\frac{1}{9}a^4b^4\right) + \left[-\frac{1}{2}a^3b^3 - \left(-\frac{1}{4}a^5b^6\right) : \left(-\frac{1}{2}a^2b^3\right)\right]^2 : \\ & : \left(\frac{1}{5}a^6b^5\right) = \end{aligned}$$

$$= \left(-\frac{2}{\cancel{3}^1} \cdot \frac{3}{\cancel{9}^3}\right) b + \left[-\frac{1}{2}a^3b^3 - \left(\frac{1}{\cancel{4}^2} \cdot \cancel{2}^1\right)a^3b^3\right]^2 : \left(\frac{1}{5}a^6b^5\right) =$$

$$= -6b + \left[-\frac{1}{2}a^3b^3 - \frac{1}{2}a^3b^3\right]^2 : \left(\frac{1}{5}a^6b^5\right) =$$

$$= -6b + (-a^3b^3)^2 : \left(\frac{1}{5}a^6b^5\right) =$$

$$= -6b + a^6b^6 : \left(\frac{1}{5}a^6b^5\right) =$$

$$= -6b + 5b = \boxed{-b}$$

17 Completa la seguente tabella.

Polinomio	Grado rispetto ad $x$	Grado rispetto ad $y$	Grado complessivo	Coefficiente del termine di grado massimo
$2x^2 + 3x^3 - x^4$	4	0	4	-1
$2xy + x^2y^2 + 3x^3y^2 - x^4 + 1$	4	2	5	3
$x^3y - x^2y + 3xy - 4$	3	1	4	1

369  $-3x^4y^2z^5, 6xy^3, 2x^2y^2z$

$MCD = xy^2$        $mcm = 6x^4y^3z^5$

## PRODOTTO DI UN MONOMIO PER UN POLINOMIO

125  $3xy(x^3 - y^2 - 2xy)$        $2m(m + n + mn)$



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1)  $3xy(x^3 - y^2 - 2xy) = 3xy \cdot x^3 + 3xy \cdot (-y^2) + 3xy \cdot (-2xy) =$   
 $= 3x^4y - 3xy^3 - 6x^2y^2$

2)  $2m(m + n + mn) =$   
 $= 2m^2 + 2mn + 2m^2n$

$$144 \quad \frac{1}{2}a(a - 2b + 3) - b(-a + b - 2) + 2b(1 + b) - \frac{1}{4}a(2a + 2) - (-2)(-2b) =$$

$$= \frac{1}{2}a^2 - \cancel{ab} + \frac{3}{2}a + \cancel{ab} - \cancel{b^2} + \cancel{2b} + \cancel{2b} + \cancel{2b^2} - \frac{1}{2}a^2 - \frac{1}{2}a - \cancel{4b} =$$

NELLA MENTE

$$\frac{1}{2}a(-\cancel{2b}) = -ab$$

$$= \left(\frac{3}{2} - \frac{1}{2}\right)a + b^2 = \boxed{a + b^2}$$

$$148 \quad [(-a)^5 \cdot (-b)^3 : (-ab)^2 : (-a^2) + (-b^9) : (-b^8)](a^3b^7) + (-a^2b^4)^2 =$$

$$= [(-a^5) \cdot (-b^3) : (a^2b^2) : (-a^2) + b] (a^3b^7) + a^4b^8 =$$

$$= [a^3b^3 : (a^2b^2) : (-a^2) + b] (a^3b^7) + a^4b^8 =$$

$$= [a^3b : (-a^2) + b] (a^3b^7) + a^4b^8 =$$

$$= [-ab + b] (a^3b^7) + a^4b^8 =$$

$$= -a^4b^8 + a^3b^8 + a^4b^8 = a^3b^8$$

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$$[(x^{2n})^{3n+1} : x^{2n}]^{3n} : (x^{5n})^{3n^2} =$$

$$= [x^{2n(3n+1)} : x^{2n}]^{3n} : x^{15n^3} =$$

$$= [x^{6n^2+2n} : x^{2n}]^{3n} : x^{15n^3} =$$

$$= [x^{6n^2+\cancel{2n}-\cancel{2n}}]^{3n} : x^{15n^3} =$$

$$= [x^{6n^2}]^{3n} : x^{15n^3} =$$

$$= x^{18n^3} : x^{15n^3} = x^{18n^3-15n^3} = \boxed{x^{3n^3}}$$