POLINOMI

giovedì 30 luglio 2020 15:27

14) $-0{,}5xy \cdot \left(xy + 4x^2y + 4xy^2 - 0{,}\overline{6}\, x^2y^2 \right)$

$$m,d_1d_2\ldots d_m = \frac{m d_1 d_2 \ldots d_m}{100\ldots0}$$

$$24{,}63 = \frac{2463}{100}$$

$$m,\overline{d_1 d_2 \ldots d_m} = \frac{m d_1 d_2 \ldots d_m}{999\ldots9}$$

$$6,\overline{3} = 6{,}333\ldots = \frac{63-6}{9} = \frac{57}{9} = \frac{19}{3}$$

$$6,\overline{278} = 6{,}278278\ldots = \frac{6278-6}{999} = \frac{6272}{999}$$

↑ PERIODO

$$m,d_1\overline{d_2} = \frac{m d_1 d_2 - m d_1}{99\ldots900\ldots0}$$

$$62,\overline{278} = \frac{62.278 - 622}{990}$$

↓

$62,278278$

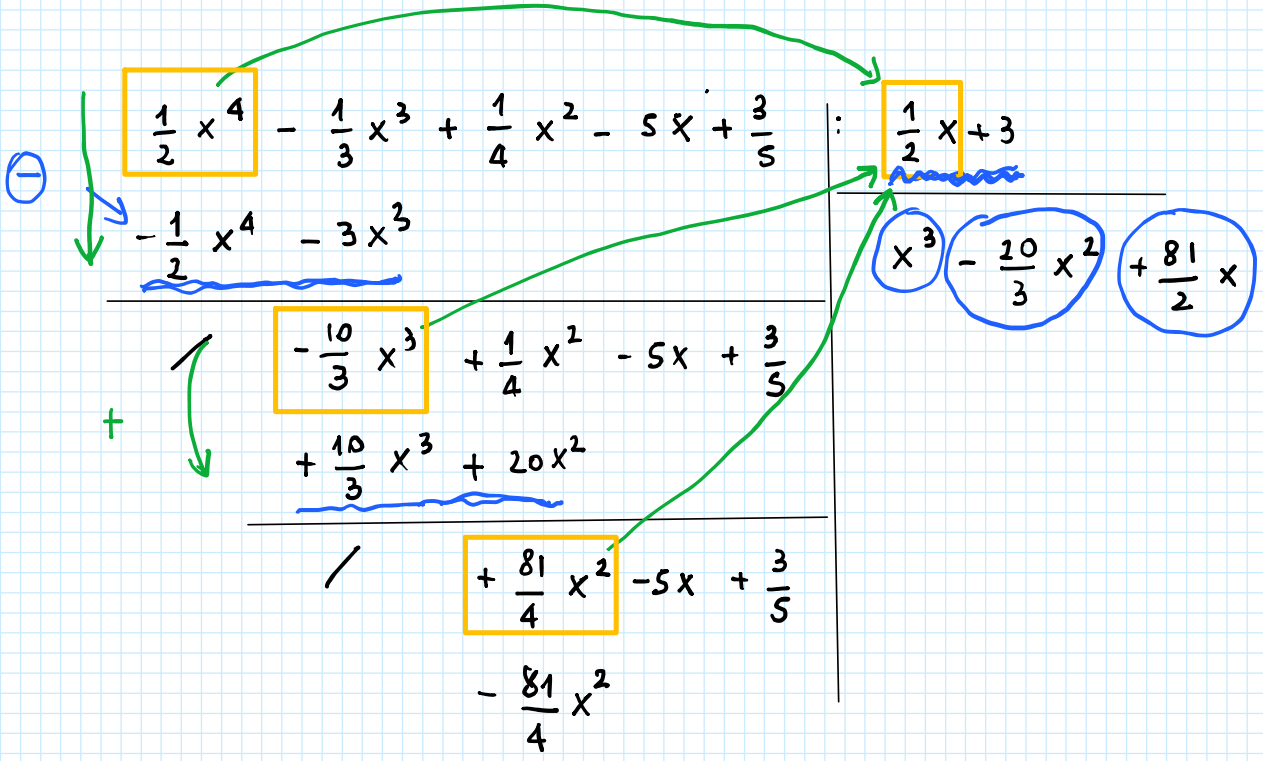
$$-0{,}5xy \cdot \left(xy + 4x^2y + 4xy^2 - 0{,}\overline{6}\, x^2y^2 \right)$$

$-0{,}5xy$ → $\frac{5}{10} = \frac{1}{2}$

$0{,}\overline{6}$ → $\frac{6-0}{9} = \frac{2}{3}$

$$-\frac{1}{2}xy \cdot \left(xy + 4x^2y + 4xy^2 - \frac{2}{3}x^2y^2 \right)$$

11) $\left(\frac{1}{2}x^4 - \frac{1}{3}x^3 + \frac{1}{4}x^2 - 5x + \frac{3}{5}\right) : \left(\frac{1}{2}x + 3\right)$



$+\frac{81}{4}x^3 : \left(-\frac{1}{2}x\right) = -\left(\frac{81}{4} \cdot \frac{2}{1}\right) x^{3-1}$

$\frac{81}{2}x\left(\frac{1}{2}x + 3\right) = \frac{81}{4}x^2 +$

$A \cdot (B + C) = AB + AC$

$\frac{81}{2} \cdot \frac{1}{2} = \frac{81}{4}$

$$\frac{81}{2} \cdot \frac{3}{1}$$

464 $1 + \frac{1}{2} \times \left\{1 + \frac{1}{2} \times \left[\left(\frac{2}{3} - \frac{1}{4}\right) \times \frac{24}{15} + \left(1 + \frac{3}{4} \times \frac{2}{3}\right) \times \frac{4}{9}\right]\right\}$

$\frac{11}{6}$

$\frac{\cancel{3}^{1}}{\cancel{4}_{2}} \cdot \frac{\cancel{2}^{1}}{\cancel{3}_{1}} = \frac{1}{2}$

NO! NO!

$1 + \frac{1}{2} \odot \left\{1 \oplus \frac{1}{2} \odot \left[\frac{\cancel{8}^{1}}{\cancel{12}_{1}} \cdot \frac{\cancel{24}^{2}}{\cancel{15}_{3}} + \left(1 + \frac{1}{2}\right) \cdot \frac{4}{9}\right]\right\} =$

$\frac{2+1}{2} = \frac{3}{2}$

$1 + \frac{1}{2} \cdot \left\{1 + \frac{1}{2} \cdot \left[\frac{2}{3} \oplus \left(\frac{\cancel{3}^{1}}{\cancel{2}_{1}} \odot \frac{\cancel{4}^{2}}{\cancel{9}_{3}}\right)\right]\right\}$

$\frac{\cancel{12}}{18} = \frac{2}{3}$

$1 + \frac{1}{2} \cdot \left\{1 + \frac{1}{2} \cdot \left[\frac{2}{3} + \frac{2}{3}\right]\right\}$

SOMMA → DENOMIN.

$1 + \frac{1}{2} \cdot \left\{1 + \frac{\cancel{1}}{\cancel{2}} \cdot \frac{\cancel{4}^{2}}{3}\right\}$

MOLTIPLICAZIO → SEMPLIFICANO

$\frac{\cancel{4}^{2}}{\cancel{6}_{3}} = \frac{2}{3}$

$\frac{6}{6} = \frac{1}{3}$

SEMPLIFICANO
↓
MCD NUM.
MCD DEN.

$1 + \frac{1}{2} \cdot \left\{ \frac{1}{1} + \frac{2}{3} \right\}$

PROD. SOMM. → DEN. COMUNE.

$\frac{3+2}{3} = \frac{5}{3}$

$1 + \left(\frac{1}{2} \cdot \frac{5}{3} \right)$

S M

$1 + \frac{5}{6} = \frac{6+5}{6} = \frac{11}{6}$

$\frac{24}{12} = \frac{2}{1} = 2$

12 6 2
6 3 1

24	2
12	2
6	2
3	3
1	

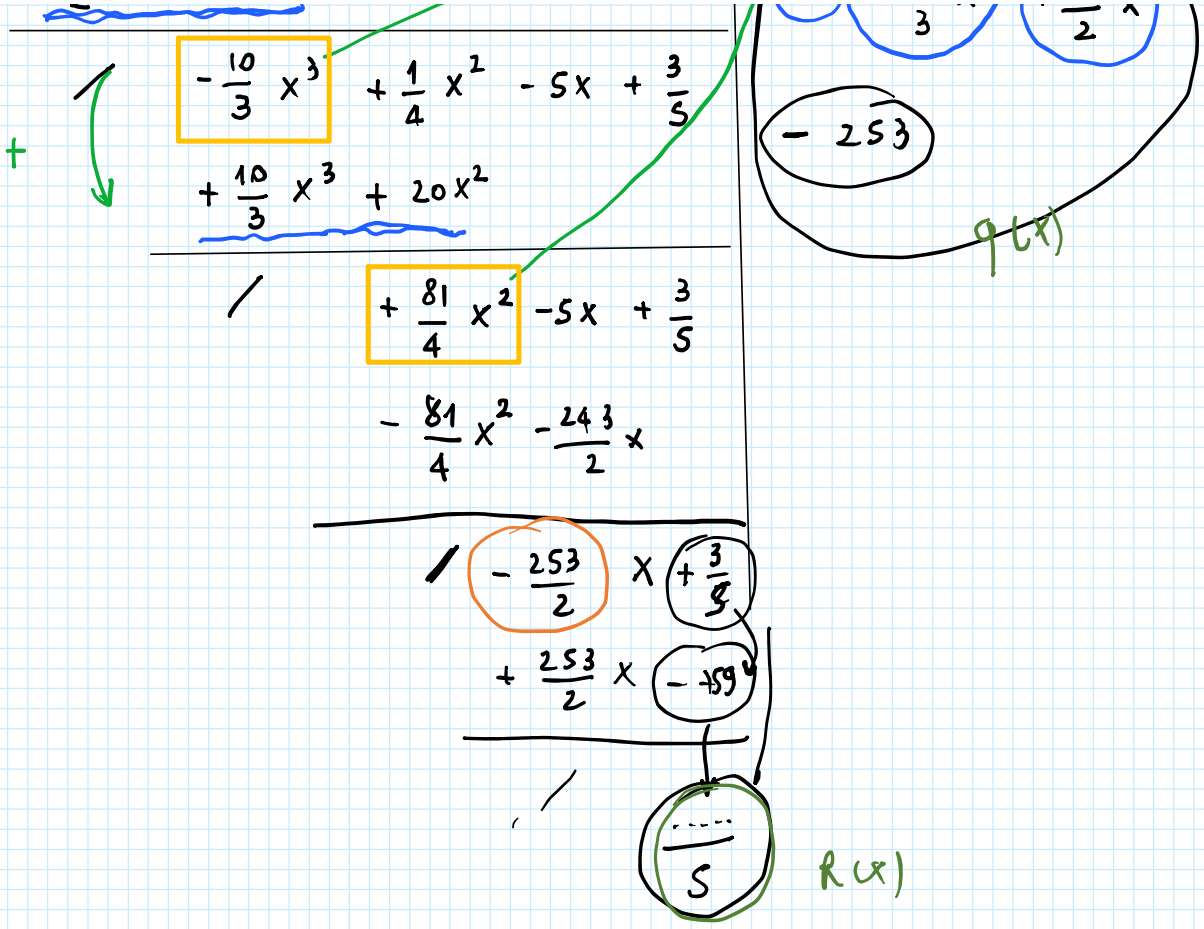
$\frac{24}{12} = \frac{2^3 \cdot 3^1}{2^2 \cdot 3^1} = \frac{2^{\cancel{3}} \cdot \cancel{3^1}}{\cancel{2^2} \cdot \cancel{3^1}} = 2$

$\frac{1}{2}x^4 - \frac{1}{3}x^3 + \frac{1}{4}x^2 - 5x + \frac{3}{5}$: $\frac{1}{2}x + 3$

$-\frac{1}{2}x^4 - 3x^3$

$x^3 - \frac{10}{3}x^2 + \frac{81}{2}x$

$-\frac{10}{3}x^3 + \frac{1}{4}x^2 - 5x + \frac{3}{5}$



$$-\frac{5}{1} - \frac{243}{2}$$

$$= \frac{-10-243}{2} = -\frac{253}{2}$$

$$\frac{81}{2}x \cdot \left(\frac{1}{2}x + \frac{3}{1}\right) = \frac{81}{4}x^2 + \frac{243}{2}x$$