

$$\frac{3}{4} \cdot \frac{2}{1} = \frac{3}{2}$$

LEZIONE 30  
Espressioni algebriche letterali di riporto

$$\begin{aligned}
 & (25x^6y^4) \cdot (-10x^4y^3) - \left(-\frac{1}{2}xy^2\right)^2 \left(\frac{1}{2}xy^2\right)^5 \left(\frac{1}{2}xy^2\right)^6 + \left(-\frac{3x^2y^7}{4}\right) \cdot \left(-\frac{1}{2}xy\right) + \frac{2x^2y}{3} - x \cdot \left(-\frac{1}{2}y^2\right) - \frac{1}{3}xy = \\
 & = -\frac{25}{2}x^{10}y^7 - \left(\frac{1}{2}xy^2\right)^2 \cdot \left(\frac{1}{2}xy^2\right)^5 \cdot \left(\frac{1}{2}xy^2\right)^6 + \frac{3}{2}x^2y + \frac{2}{3}x^2y + \frac{1}{2}xy^2 - \frac{1}{3}xy = \\
 & = -\frac{5}{2}x^2y - \left(\frac{1}{2}xy^2\right)^2 + \frac{3}{2}x^2y + \frac{2}{3}x^2y + \frac{1}{2}xy^2 - \frac{1}{3}xy = \\
 & = \left(-\frac{5}{2}x^2y\right) - \frac{1}{2}xy^2 + \left(\frac{3}{2}x^2y\right) + \left(\frac{2}{3}x^2y\right) + \frac{1}{2}xy^2 - \frac{1}{3}xy = \\
 & = \left(-\frac{5}{2} + \frac{3}{2} + \frac{2}{3}\right)x^2y - \frac{1}{3}xy = \\
 & = \left(\frac{-15+9+4}{6}\right)x^2y - \frac{1}{3}xy = \\
 & = -\frac{2}{3}x^2y - \frac{1}{3}xy = \boxed{-\frac{1}{3}x^2y - \frac{1}{3}xy}
 \end{aligned}$$

$$\begin{aligned}
& \left\{ \left[ \underline{(m+2)}(\underline{m-1})+2 \right] (m^2+m-1) + m \right\} \left( -\frac{1}{2}m \right)^2 - \left( -\frac{1}{2}m^3 \right)^2 = \\
& = \left\{ \left[ \underline{m^2-m+2m-2} + \underline{2} \right] (m^2+m-1) + m \right\} \left( \frac{1}{4}m^2 \right) - \left( +\frac{1}{4}m^6 \right) = \\
& = \left\{ \underline{(m^2+m)}(\underline{m^2+m-1}) + m \right\} \left( \frac{1}{4}m^2 \right) - \frac{1}{4}m^6 = \\
& = \left\{ \underline{m^4+m^3-m^2+m^3+m^2-m+1} + m \right\} \left( \frac{1}{4}m^2 \right) - \frac{1}{4}m^6 = \\
& = \left\{ \underline{m^4+2m^3} \right\} \left( \frac{1}{4}m^2 \right) - \frac{1}{4}m^6 = \\
& = \frac{1}{4}m^6 + \frac{1}{2}m^5 - \frac{1}{4}m^6 = \\
& = \boxed{\frac{1}{2}m^5}
\end{aligned}$$