

N= 381

$$\begin{aligned} & \left(-\frac{6}{7}a\right)\left(-\frac{1}{3}ab^2 - \frac{17}{18}ab^2 + \frac{3}{2}ab^2 + \frac{5}{9}ab^2\right) + \left(\frac{4}{15}a^4b^3 + \frac{5}{6}a^4b^3 - \frac{7}{10}a^4b^3\right) = \left(-\frac{3}{4}a^2b + \frac{6}{5}a^2b\right) + \\ & = \left(-\frac{6}{7}a\right)\left(\frac{-6-17+27+10}{18}\right)ab^2 + \left(\frac{8+25-21}{30}\right)a^4b^3 = \left(\frac{-15+24}{20}\right)a^2b + \frac{16}{9}a^2b^2 \quad \boxed{+ \frac{16}{9}a^2b^2} \\ & = \left(-\frac{6}{7}a\right)\left(\frac{14}{18}ab^2\right) + \left(\frac{12}{30}a^4b^3\right) = \left(+\frac{9}{20}a^2b\right) + \frac{16}{9}a^2b^2 \\ & = -\frac{2}{3}a^2b^2 + \left(\frac{12}{30}a^4b^3\right) \cdot \left(\frac{20}{3}a^2b\right) + \frac{16}{9}a^2b^2 \\ & = -\frac{2}{3}a^2b^2 + \frac{8}{9}a^2b^2 + \frac{16}{9}a^2b^2 \\ & = \left(\frac{-6+8+16}{9}\right)a^2b^2 = \frac{18}{9}a^2b^2 = 2a^2b^2 \end{aligned}$$

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$$\begin{aligned} & \frac{7}{8}x\left(3y - \frac{5}{7}y\right) + \left(\frac{3}{4}x^2y^3 + \frac{2}{5}x^2y^3 - \frac{7}{20}x^2y^3\right) = \left(\frac{13}{10}xy^2 + \frac{6}{5}xy^2 - \frac{5}{2}xy^2\right) + \left(\frac{3}{4}xy - \frac{5}{8}xy\right) \\ & = \frac{7}{8}x \cdot \left(\frac{21-5}{7}\right)y + \left(\frac{15+8-7}{20}\right)x^2y^3 = \left(\frac{13+8-25}{10}\right)xy^2 + \left(\frac{6-5}{8}\right)xy = \\ & = \frac{7}{8}x \cdot \frac{16}{7}x + \frac{16}{20}x^2y^3 = \left(-\frac{4}{10}xy^2\right) + \frac{1}{8}xy = \\ & = 2xy + \frac{24}{20}x^2y^3 \cdot \left(-\frac{10}{4xy^2}\right) + \frac{1}{8}xy = \\ & = \cancel{2xy} - \cancel{2}xy + \frac{1}{8}xy = +\frac{1}{8}xy \end{aligned}$$