

FICHA 6: Operaciones combinadas con fracciones (III)

1. Efectuar las siguientes **operaciones combinadas**, simplificando siempre en todos los pasos, y respetando la jerarquía:

a) $\frac{2}{3} + \left[1 - \left(\frac{3}{4} - \frac{1}{6} \right) \right] =$ (Soluc: 13/12)

b) $\frac{4}{5} - \frac{7}{3} \cdot \frac{3}{7} + \frac{1}{5} \left(2 + \frac{1}{2} \right) - \frac{7}{3} + 4 : \frac{6}{5} =$ (Soluc: 13/10)

c) $\frac{2}{3} + \frac{5}{4} \left(\frac{3}{5} + \frac{4}{10} \right) - \frac{5}{4} + \left(\frac{3}{5} : 4 \right) + \frac{12}{5} =$ (Soluc: 193/60)

d) $2 + \frac{1}{5} : \left(2 + \frac{7}{3} - \frac{2}{4} + \frac{5}{3} \right) =$ (Soluc: 112/55)

e) $\left(\frac{2}{7} - \frac{4}{5} + \frac{2}{8} \right) \cdot \frac{3}{2} - \frac{7}{5} : \frac{4}{7} =$ (Soluc: -797/280)

f) $\frac{17}{9} - \frac{15}{5} + \frac{4}{3} : \left(\frac{1}{5} + \frac{2}{3} - \frac{1}{15} \right) + \frac{14}{3} : \frac{16}{8} =$ (Soluc: 26/9)

g) $\frac{21}{5} + \frac{15}{4} \cdot \frac{16}{3} - \frac{15}{30} + \frac{12}{4} : \frac{5}{4} + 3 =$ (Soluc: 291/10)

h) $\frac{2}{3} - \left[\frac{3}{2} - \frac{1}{5} - \left(\frac{2}{5} - \frac{1}{3} \right) + \left(\frac{6}{5} - \frac{1}{2} \right) \right] - \frac{3}{4} + \left(\frac{1}{2} - \frac{1}{3} \right) =$ (Soluc: -37/20)

i) $2 - \left[\frac{4}{3} - \left(\frac{1}{2} + \frac{2}{5} \right) - \frac{1}{3} \right] - \left(\frac{4}{3} + 2 \right) - \frac{1}{5} =$

(Soluc: -49/30)

j) $2 + \left(\frac{5}{2} - 3 \right) - \left[\frac{7}{10} - \left(\frac{2}{5} + \frac{1}{4} \right) \right] =$

(Soluc: 29/20)

k) $-\frac{3}{8} + \left(4 - \frac{1}{2} \right) - \left[\left(2 - \frac{5}{4} \right) + \left(\frac{7}{2} - \frac{1}{8} \right) \right] =$

(Soluc: -1)

l) $\left(\frac{4}{3} - \frac{-1}{9} \right) + \left[2 - \left(\frac{5}{4} + \frac{2}{3} \right) \right] - \frac{7}{2} =$

(Soluc: 19/36)

m) $\left[\left(\frac{4}{6} + \frac{1}{2} \right) : \left(\frac{4}{3} - \frac{5}{12} \right) \right] \cdot \left(\frac{1}{6} + \frac{1}{15} \right) =$

(Soluc: 31/165)

n) $\left(\frac{1}{3} - \frac{4}{5} \right) \cdot \left[\left(\frac{1}{3} - 1 \right) \cdot 3 - \frac{1+2/5}{3} \right] =$

(Soluc: 259/225)

o) $\frac{4}{5} : \left[\frac{12}{16} \left(\frac{1}{6} + \frac{2}{3} \right) - \frac{3}{8} \right] - 3 \left[\frac{1}{6} : \left(1 - \frac{2}{5} \right) \right] =$

(Soluc: 71/30)

p) $\frac{3}{2} - \frac{1}{2} \cdot \frac{4}{3} : \left(\frac{4}{3} - \frac{2}{3} \cdot \frac{15}{8} + 1 \right) =$

(Soluc: 23/26)