

CASTILLOS

Efectúa las siguientes operaciones, simplificando siempre que sea posible:

$$\text{a) } \frac{1 - \left(\frac{3}{5} + \frac{2}{5} \right) + \frac{7}{2}}{1 + \frac{2}{3} \cdot \frac{1}{2} - \frac{1}{4}} =$$

$$\text{b) } 1 + \frac{1}{1 + \frac{1}{1 + \frac{1}{2}}} =$$

$$\text{c) } \frac{\frac{\frac{5}{1 + \frac{1}{2}}}{2} - \frac{2}{9}}{\frac{4}{1 + \frac{1}{2}} + \frac{12}{1 + \frac{1}{2}}} =$$

$$\text{d) } \frac{\frac{\left(\frac{3}{4} - \frac{1}{3} \right) \cdot \frac{9}{4}}{\frac{3}{5}}}{\frac{\frac{7}{3} \cdot \frac{9}{3} \cdot \frac{3}{21}}{4}} =$$

CASTILLOS (Soluciones)

Efectúa las siguientes operaciones, simplificando siempre que sea posible:

$$\text{a) } \frac{1 - \left(\frac{3}{5} + \frac{2}{5}\right) + \frac{7}{2}}{1 + \frac{2}{3} \cdot \frac{1}{2} - \frac{1}{4}} = \frac{\frac{7}{2}}{\frac{13}{12}} = \frac{42}{13}$$

$$\text{b) } 1 + \frac{1}{1 + \frac{1}{1 + \frac{1}{2}}} = 1 + \frac{1}{1 + \frac{1}{\frac{3}{2}}} = 1 + \frac{1}{1 + \frac{2}{3}} = 1 + \frac{1}{\frac{5}{3}} = 1 + \frac{3}{5} = \frac{8}{5}$$

$$\text{c) } \frac{\frac{5}{1 + \frac{1}{2}} - \frac{2}{9}}{\frac{4}{1 + \frac{1}{2}} + \frac{12}{1 + \frac{1}{2}}} = \frac{\frac{5}{\frac{3}{2}} - \frac{2}{9}}{\frac{4}{\frac{3}{2}} + \frac{12}{\frac{3}{2}}} = \frac{\frac{10}{3} - \frac{2}{9}}{\frac{8}{3} + \frac{24}{3}} = \frac{\frac{60}{18} - \frac{4}{18}}{\frac{32}{3}} = \frac{\frac{56}{18}}{\frac{32}{3}} = \frac{7}{24}$$

$$\text{d) } \frac{\frac{\left(\frac{3}{4} - \frac{1}{3}\right) \cdot \frac{9}{4}}{\frac{3}{5}}}{\frac{4}{\frac{7}{3} \cdot \frac{9}{3} \cdot \frac{3}{21}}} = \frac{\frac{\frac{5}{12} \cdot \frac{9}{4}}{\frac{3}{5}}}{\frac{\frac{4}{1}}{1}} = \frac{\frac{\frac{45}{48}}{\frac{3}{5}}}{1} = \frac{\frac{144}{2}}{1} = \frac{900}{288} = \frac{25}{8}$$