

FRACCIONES

Problema 24:

Resolver

$$\frac{2\frac{1}{8} - \left(\frac{7}{8} + \frac{5}{12}\right)}{3\frac{1}{2} : 9} \times \frac{3}{5} \times \left(4 + \frac{2}{3}\right)$$

Solución Problema 24:

Convertimos los números mixtos en fracciones ordinarias:

$$2\frac{1}{8} = \frac{16 + 1}{8} = \frac{17}{8}$$

$$3\frac{1}{2} = \frac{6 + 1}{2} = \frac{7}{2}$$

Sustituimos su valor en la fracción original y operamos en ella:

$$\frac{\frac{17}{8} - \left(\frac{7}{8} + \frac{5}{12}\right)}{\frac{7}{2} : 9} \times \frac{3}{5} \times \left(4 + \frac{2}{3}\right)$$

$$\frac{\frac{17}{8} - \left(\frac{7x3 + 5x2}{24}\right)}{\frac{7}{18}} \times \frac{3}{5} \times \left(\frac{12 + 2}{3}\right)$$

$$\frac{\frac{17}{8} - \frac{31}{24}}{\frac{7}{18}} \times \frac{3}{5} \times \frac{14}{3} = \frac{\frac{17x3 - 31x1}{24}}{\frac{7}{18}} \times \frac{3}{5} \times \frac{14}{3}$$

$$\frac{\frac{51-31}{24}}{\frac{7}{18}} \times \frac{14}{5} = \frac{\frac{4 \times 5}{\cancel{4} \times \cancel{6}}}{\frac{7}{\cancel{6} \times 3}} \times \frac{14}{5} = \frac{5 \times 3}{7} \times \frac{2 \times \cancel{7}}{\cancel{5}} = 3 \times 2 = 6$$