FRACCIONES

Problema 28:

Resolver

$$\frac{\frac{4}{9}\text{X}\frac{5}{7}:\frac{2}{3}+\frac{5}{8}\text{X}0{,}6-\frac{1}{2}:\frac{3}{5}}{3:\frac{7}{5}+\frac{1}{4}(\frac{1}{2}-0{,}4)}\text{X}(11^2+\frac{2}{5})$$

Solución Problema 28:

Convertimos las fracciones decimales en fracciones ordinarias:

$$0{,}6=\frac{6}{10}=\frac{\cancel{2}\text{x}3}{\cancel{2}\text{x}5}=\mathbf{\frac{3}{5}}$$

$$0{,}4=\frac{4}{10}=\frac{\cancel{2}\text{x}2}{\cancel{2}\text{x}5}=\mathbf{\frac{2}{5}}$$

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

$$\frac{\frac{4}{9}\text{X}\frac{5}{7}:\frac{2}{3}+\frac{5}{8}\text{X}\mathbf{\frac{3}{5}}-\frac{1}{2}:\frac{3}{5}}{3:\frac{7}{5}+\frac{1}{4}(\frac{1}{2}-\mathbf{\frac{2}{5}})}\text{X}(121+\frac{2}{5})$$

$$\frac{\frac{20}{63}:\frac{2}{3}+\frac{\cancel{5}}{8}\text{X}\frac{3}{\cancel{5}}-\frac{1}{2}:\frac{3}{5}}{\frac{15}{7}+\frac{1}{4}(\frac{1\text{x}5-2\text{x}2}{10})}\text{X}(121+\frac{2}{5})$$

$$\frac{\frac{20x3}{63\text{x}2}+\frac{3}{8}-\frac{5}{6}}{\frac{15}{7}+\frac{1}{4}(\frac{1}{10})}\text{X}(121+\frac{2}{5})$$

$$\frac{\cancel{2}x10x\cancel{3}}{21x\cancel{3}x\cancel{2}} + \frac{3}{8} - \frac{5}{6} \over \frac{15}{7} + \frac{1}{40} X(\frac{605+2}{5})$$

$$\frac{\frac{10}{21} + \frac{3}{8} - \frac{5}{6}}{\frac{15}{7} + \frac{1}{40}} X(\frac{607}{5})$$

$$\frac{\frac{10x8 + 3x21 - 5x28}{168}}{\frac{15x40+7}{280}} X(\frac{607}{5})$$

$$\frac{\frac{80 + 63 - 140}{168}}{\frac{607}{280}} X(\frac{607}{5})$$

$$\frac{\frac{3}{168}}{\frac{607}{280}} X\left(\frac{607}{5}\right) = \frac{3x280x\cancel{607}}{168x\cancel{607}x5} = \frac{3x280}{168x5} = \frac{840}{840} = \mathbf{1}$$

FRACCIONES: Problema 28