

EJERCICIOS DE FRACCIONES

Resolver las siguientes fracciones de términos racionales, simplificando en todo momento los pasos intermedios y el resultado:

$$1. \frac{\frac{3}{2} + \frac{1}{2}}{\frac{5}{3} - \frac{1}{2}} = \quad (\text{Soluc: } 33/5)$$

$$2. \frac{\frac{2}{3} - \frac{1}{6} + \frac{1}{3}}{\frac{5}{2} - \frac{2}{6} - \frac{3}{5}} = \quad (\text{Soluc: } 7/24)$$

$$3. \frac{\frac{1}{2} + \frac{3}{2} \cdot \frac{1}{6}}{\left(\frac{1}{2} + \frac{3}{2}\right) : \frac{1}{6}} = \quad (\text{Soluc: } 1/16)$$

$$4. \frac{\frac{1}{2} + \frac{3}{5} : \frac{2}{3} - 4}{\left(3 + \frac{2}{5}\right) \cdot \frac{1}{3}} = \quad (\text{Soluc: } -39/17)$$

$$5. \frac{\left(\frac{2}{5} : 3 + \frac{1}{2}\right) \cdot \frac{1}{3} - \frac{2}{7}}{\frac{2}{5} \cdot 3 - \left(\frac{1}{2} + \frac{1}{3}\right) \cdot \frac{2}{7}} = \quad (\text{Soluc: } -47/606)$$

$$6. \frac{\frac{3}{5} : \left(1 - \frac{2}{3} \cdot \frac{9}{4}\right) + 3}{\left[\frac{1}{7} \cdot \left(\frac{2}{7} - \frac{1}{3}\right) + \frac{5}{2}\right] : \frac{1}{2}} = \quad (\text{Soluc: } 1323/3665)$$

$$7. \frac{\frac{1}{2} - \frac{1}{3} \cdot \frac{2}{5} + \frac{3}{2} : \frac{1}{4} + 5}{\frac{1}{2} - \frac{1}{3} \cdot \left(\frac{2}{5} + \frac{3}{2} : \frac{1}{4} + 5\right)} = \quad (\text{Soluc: } -31/9)$$

$$8. \frac{\left(\frac{1}{2} : \frac{1}{3} + 2\right) \cdot \frac{2}{5} - \frac{1}{2}}{\frac{1}{3} : \left(\frac{2}{3} + \frac{1}{3} \cdot \frac{5}{2}\right) + \frac{1}{3}} = \quad (\text{Soluc: } 81/50)$$

$$9. \frac{1 - \frac{1}{2} + \frac{1}{3} \cdot \frac{1}{5} - 3}{\left(1 - \frac{1}{2}\right) \cdot \left(\frac{1}{3} + \frac{1}{5}\right) + 3} = \quad (\text{Soluc: } -73/98)$$

$$10. \frac{1 + \frac{1}{2}}{1 - \frac{1}{3}} = \quad (\text{Soluc: } 9/4)$$

$$11. \frac{\frac{2}{5} - \frac{6}{4} + \frac{2}{3} \cdot \frac{1}{3} + \frac{1}{5}}{1 - \frac{2}{5} - \frac{6}{4} - \frac{2}{3} + \frac{6}{5}} = \quad (\text{Soluc: } 893/1512)$$

$$12. \frac{\frac{1}{2} + \frac{1}{3} - \frac{1}{4}}{2 + \frac{5}{2} - \frac{1}{6} - \frac{3}{2 - \frac{1}{4}}} = \quad (\text{Soluc: } -49/130)$$

$$13. \frac{\left(2 + \frac{1}{3}\right) \cdot \left(4 - \frac{2}{3}\right)}{1 + \frac{5}{4} : \frac{3}{12}} = \quad (\text{Soluc: } 35/27)$$

$$14. \frac{\frac{5}{3} + \frac{3}{4} : 1 - \frac{5}{4} + \frac{17}{3}}{\frac{15}{3} + \frac{2}{5}} = \quad (\text{Soluc: } 205/162)$$

$$15. \frac{\left[-3 + \frac{2}{5} \left(\frac{1}{2} + \frac{3}{2} \cdot \frac{8}{27}\right)\right] : \frac{3}{2}}{\left(\frac{2}{5} - 3 : \frac{3}{2}\right) - \frac{8}{27} \cdot \left(\frac{1}{2} + \frac{3}{2}\right)} = \quad (\text{Soluc: } 59/32)$$

$$16. \frac{\frac{1}{4} + \frac{2}{4} + \frac{3}{4} \cdot \frac{2}{9}}{2 + \frac{1}{3} \cdot \left(2 - \frac{1}{3} \cdot \frac{6}{5}\right)} = \quad (\text{Soluc: } 55/152)$$