

Espressioni con le frazioni

Calcola il valore delle seguenti espressioni.

1. $\frac{8}{4} \cdot \frac{\frac{6}{12} + \frac{1}{3}}{\frac{9}{7} \cdot \frac{49}{81}} + \frac{\frac{6}{3}}{\frac{14}{4} \cdot \frac{8}{6}}$ [$\frac{61}{21}$]

2. $\left[\frac{\frac{12}{4} \cdot \frac{4}{6} - (\frac{1}{5} : \frac{1}{10})}{\frac{3}{4} - \frac{2}{3}} \right] + \frac{3}{4} \cdot \left(\frac{2}{16} + \frac{5}{6} \right)$ [$\frac{9}{16}$]

3. $\frac{2}{4} + \left[\frac{(\frac{3}{8} - \frac{1}{4}) \cdot \frac{42}{7}}{\frac{4}{9} : \frac{16}{27} + \frac{1}{2}} \right] - \frac{50}{60}$ [$\frac{4}{15}$]

4. $\frac{1}{2} + \frac{1}{2} \cdot \left(\frac{1}{2} : \frac{1}{2} \right) - \left(\frac{1}{2} \cdot 3 + \frac{1}{2} \right) + \left(\frac{1}{2} \cdot \frac{1}{2} + \frac{1}{2} \right) + \frac{3}{4}$ [$\frac{1}{2}$]

5. $\left(\frac{2}{7} + \frac{4}{6} \right) \cdot \frac{63}{60} - \left[\frac{(\frac{4}{6} : \frac{2}{7}) - (\frac{5}{4} + \frac{6}{4} \cdot \frac{2}{9})}{\frac{2}{4} + \frac{3}{8}} \right]$ [$\frac{1}{7}$]

6. $\frac{2}{3} + \frac{1}{3} + 4 - \left(\frac{\frac{4}{3} : \frac{8}{18}}{\frac{2}{7} \cdot \frac{28}{6}} \right) + \frac{9}{2} \cdot \frac{4}{3}$ [$\frac{35}{4}$]

7. $\left\{ \left[\frac{13}{7} - \left(1 - \frac{1}{2} \right)^2 \right] : \left[\left(1 - \frac{1}{7} \right) - \left(\frac{1}{2} \right)^2 \right] \right\} \cdot \frac{14}{45} - \left(1 - \frac{1}{2} \right)$ [$\frac{11}{34}$]

8. $\left\{ \frac{1}{4} \cdot \left[\left(\frac{7}{6} + \frac{5}{3} \right) \cdot \left(\frac{1}{12} + \frac{3}{4} \right) \right] \right\} : \left\{ \left[\left(\frac{8}{5} + \frac{7}{2} \right) + \left(\frac{5}{2} - \frac{3}{5} \right) \right] - \left(\frac{7}{9} : \frac{21}{36} \right) \right\}$ [$\frac{5}{48}$]

9. $\left\{ \left(\frac{1}{2} \cdot \frac{8}{3} \right)^2 + \left[\left(\frac{5}{2} - \frac{12}{7} \right) : \left(\frac{5}{3} + \frac{7}{9} \right) \right] : \left[\frac{\frac{5}{2}}{\frac{7}{4} - \frac{7}{9}} \right] \right\} \cdot \frac{36}{5}$ [$\frac{137}{10}$]

10. $\left[\left(\frac{3}{14} + \frac{2}{7} \right) \cdot \left(\frac{12}{15} - \frac{2}{5} \right) \right] \cdot \left(\frac{7}{4} - \frac{5}{6} + \frac{17}{12} \right) - \frac{128}{5} : \frac{64}{15} + \frac{2}{3} - \left[\left(\frac{3}{2} \right)^3 : \frac{9}{4} \right]$ [$\frac{43}{15}$]

11. $\left[\left(\frac{12}{45} \cdot \frac{15}{24} \right) : \left(\frac{21}{32} \cdot \frac{24}{7} \right) \right] : \left\{ \frac{1}{2} + \left(\frac{2}{3} - \frac{3}{8} + \frac{7}{12} \right) : \left[\left(\frac{4}{3} - \frac{5}{6} \right) \cdot \left(\frac{13}{6} - \frac{5}{3} \right) \right] \right\}$ [$\frac{2}{45}$]

12. $\left\{ \left[\left(\frac{2}{3} \right)^2 + \frac{5}{3} + \frac{4}{3} \right] : \frac{8}{27} \cdot \left[\left(\frac{8}{5} - \frac{3}{15} \right) + \left(\frac{3}{4} + \frac{2}{8} \right) \right] \right\} - \left\{ \left[\left(\frac{7}{3} + \frac{5}{6} \right) : \left(\frac{7}{9} - \frac{2}{3} \right) \right] - \left(\frac{4}{5} \cdot \frac{45}{8} \right) \right\}$

[$\frac{39}{10}$]