

Connexiones et 4 (scuola B. NIPASSO FRAZON)

a)  $\left(\frac{3}{2}\right)^2 = \frac{3^2}{2^2} = \frac{3 \cdot 3}{2 \cdot 2} = \frac{9}{4}$

$\left(\frac{12}{4}\right)^3 = \frac{12^3}{4^3} = \frac{12 \cdot 12 \cdot 12}{4 \cdot 4 \cdot 4}$

$\frac{3^2}{2} = \frac{3 \cdot 3}{2} = \frac{9}{2}$

$\frac{1^8}{10} = \frac{1^n}{10} = \frac{1}{10}$

$\left(\frac{7}{6}\right)^0 = n^0 = 1$

$\left(\frac{10}{1}\right)^{10} = 10000000000$

b)  $\left(\frac{4}{5}\right)^2 \cdot \left(\frac{4}{5}\right)^3 = \left(\frac{4}{5}\right)^{2+3} = \left(\frac{4}{5}\right)^5$

$\left(\frac{36}{21}\right)^2 \cdot \left(\frac{14}{12}\right)^2 = \left(\frac{36}{21} \cdot \frac{14}{12}\right)^2 = 2^2 = (4)$

$\left[\left(\frac{1}{10}\right)^5\right]^3 = \left(\frac{1}{10}\right)^{5 \cdot 3} = \left(\frac{1}{10}\right)^{15}$

$\left(\frac{1}{2}\right)^2 + \left(\frac{1}{3}\right)^2 = \frac{1}{4} + \frac{1}{9} = \frac{9+4}{36} = \frac{13}{36}$

$\left(\frac{1}{7}\right)^8 : \left(\frac{1}{7}\right)^4 = \left(\frac{1}{7}\right)^{8-4} = \left(\frac{1}{7}\right)^4$

$\left(\frac{1}{3}\right)^3 : \left(\frac{1}{2}\right)^3 = \left(\frac{1}{3} : \frac{1}{2}\right)^3 = \left(\frac{1}{3} \cdot \frac{2}{1}\right)^3 = \left(\frac{2}{3}\right)^3$

$\left(\frac{4}{2}\right)^2 - \left(\frac{1}{3}\right)^2 = \frac{4}{1} - \frac{1}{9} = \frac{9-1}{9} = \frac{8}{9}$

Connexiones et 5

$1 + \left(\frac{4}{5} - \frac{3}{5} \cdot \frac{10^2}{12} + 1 : \frac{5}{2}\right) : \frac{14}{20} \cdot \frac{10}{2} - 2 =$

$= 1 + \left(\frac{4}{5} - \frac{2}{4} + 1 \cdot \frac{2}{5}\right) : \frac{14}{20} \cdot \frac{10}{2} - 2 =$

$= 1 + \left(\frac{4}{5} - \frac{1}{2} + \frac{2}{5}\right) : \frac{14}{20} \cdot \frac{10}{2} - 2 =$

$= 1 + \left(\frac{8-5+4}{10}\right) : \frac{14}{20} \cdot \frac{10}{2} - 2 =$

$= 1 + \frac{7}{10} \cdot \frac{10}{14} \cdot \frac{10}{2} - 2 =$

$= 1 + 5 - 2 = 4$