

17/10/2019

$$\text{367} \left\{ 1 - \left[\frac{2}{3} - \frac{1}{2} \cdot \left(\frac{1}{3} - 2 \right) + \frac{1}{3} \cdot \left(\frac{1}{2} - 1 \right) \right] \right\} \cdot \left(-2^0 - \frac{1}{2} \right) =$$

$$= \left\{ 1 - \left[\frac{2}{3} - \frac{1}{2} \cdot \frac{1-6}{3} + \frac{1}{3} \cdot \frac{1-2}{2} \right] \right\} \cdot \left(-1 - \frac{1}{2} \right) =$$

$$= \left\{ 1 - \left[\frac{2}{3} - \frac{1}{2} \cdot \left(-\frac{5}{3} \right) + \frac{1}{3} \cdot \left(-\frac{1}{2} \right) \right] \right\} \cdot \frac{-2-1}{2} =$$

$$= \left\{ 1 - \left[\frac{2}{3} + \frac{5}{6} - \frac{1}{6} \right] \right\} \cdot \left(-\frac{3}{2} \right) =$$

$$= \left\{ 1 - \frac{4+5-1}{6} \right\} \cdot \left(-\frac{3}{2} \right) =$$

$$= \left\{ 1 - \frac{8}{6} \right\} \cdot \left(-\frac{3}{2} \right) =$$

$$= \frac{6-8}{6} \cdot \left(-\frac{3}{2} \right) = -\frac{\cancel{2}}{\cancel{6}_2} \cdot \left(-\frac{\cancel{3}}{\cancel{2}_1} \right) = \boxed{+\frac{1}{2}}$$

$$401 \quad \frac{(-3,1\bar{6})(-0,3)(-0,\bar{3})}{0,3 + 0,\bar{3}} - \left(-\frac{7}{5}\right) : (-4,9) \cdot \left(-5 - \frac{1}{4}\right) =$$

$$3,1\bar{6} = \frac{316 - 31}{90} = \frac{\overset{57}{\cancel{285}}}{\underset{18}{\cancel{90}}} = \frac{19}{6} \quad 0,3 = \frac{3}{10} \quad 4,9 = \frac{49}{10}$$

$$0,\bar{3} = \frac{1}{3}$$

$$= \frac{-\frac{19}{6} \cdot \left(-\frac{\cancel{3}}{10}\right) \cdot \left(-\frac{1}{\cancel{3}}\right)}{\frac{3}{10} + \frac{1}{3}} - \left(-\frac{7}{5}\right) : \left(-\frac{49}{10}\right) \cdot \left(\frac{-20-1}{4}\right) =$$

$$= \frac{-\frac{19}{60}}{\frac{9+10}{30}} - \left(-\frac{\overset{1}{\cancel{7}}}{\cancel{5}}\right) \cdot \left(-\frac{\overset{1}{\cancel{2}}}{\underset{\cancel{7}}{\cancel{49}}}\right) \cdot \left(-\frac{\overset{3}{\cancel{21}}}{\underset{2}{\cancel{4}}}\right) =$$

$$= \frac{-\frac{19}{60}}{\frac{19}{30}} + \frac{3}{2} = -\frac{\overset{1}{\cancel{19}}}{\underset{2}{\cancel{60}}} \cdot \frac{\overset{1}{\cancel{30}}}{\underset{1}{\cancel{19}}} + \frac{3}{2} = -\frac{1}{2} + \frac{3}{2} =$$

$$= \frac{-1 + 3}{2} = \frac{2}{2} = \boxed{1}$$

POTENZE A ESPONENTE NEGATIVO

3^{-2} cosa è ragionevole che voglia dire?

$$3^{-2} \cdot 3^2 = 3^{-2+2} = 3^0 = 1$$

quindi $3^{-2} \cdot 3^2 = 1$, cioè 3^{-2} deve essere l'inverso moltiplicativo di 3^2 , cioè deve essere $\frac{1}{3^2}$

IN GENERALE $a^{-m} = \frac{1}{a^m}$ $a \neq 0$ $m \in \mathbb{N}$

ESEMPI $5^{-7} = \frac{1}{5^7}$ $(-2)^{-3} = \frac{1}{(-2)^3}$

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

$$\left(-\frac{5}{7}\right)^{-1} = \left(-\frac{7}{5}\right)$$