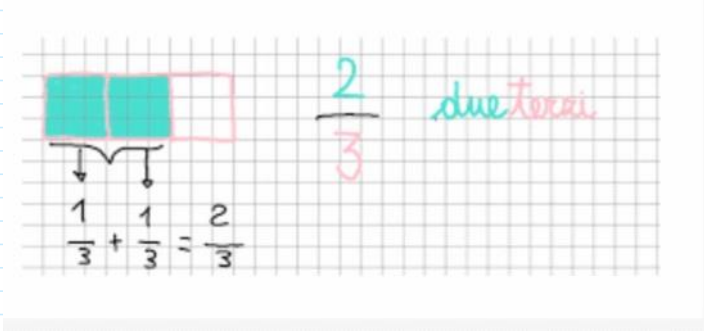
Frazioni

venerdì 17 luglio 2020 08:55

FRAZIONI NUMERICHE



• **406** $\left(\frac{4}{5}+2+\frac{2}{3}\right)-\left\{\frac{10}{3}-\left[\frac{7}{5}-\left(\frac{4}{5}+\frac{2}{3}-\frac{19}{15}\right)\right]\right\}-\left[\left(2-\frac{2}{3}\right)-\frac{4}{5}\right]$ $\frac{4}{5}$

A - B - C

$\frac{4}{5}+\frac{2}{1}+\frac{2}{3}$

MINIMO COMUNE DENOMINATO

= MINIMO COMUNE MULTIPLO

(m.c.m)

1) SCOMPORRE IN FATTORI PRIMI

$5 = 5 = 5^1$

$1 = 1$

$3 = 3 = 3^1$

2) BASI COMUNI E NON COMUNI

3) ESPONENTI MAGGIORI → mcm = 3 · 5

Esempio $(24 ; 10 ; 36)$

24	2
12	2
6	2
3	3
1	

$2^3 \cdot 3$

$10 = 2 \cdot 5$

$36 = 6^2$

$36 = (3 \cdot 2)^2$

$36 = 3^2 \cdot 2^2$

$24 = 6 \cdot 4$

$= 3 \cdot 2 \cdot 2^2$

$= 2^3 \cdot 3$

$$\begin{cases} 24 = 2^3 \cdot 3^1 \\ 10 = 2^1 \cdot 5^1 \\ 36 = 2^2 \cdot 3^2 \end{cases}$$

$mcm = 2^3 \cdot 3^2 \cdot 5^1$

$= 8 \cdot 9 \cdot 5$

$= 40 \cdot 9 =$

$= 4 \cdot 10 \cdot 9 = 360$

$$\frac{4}{5} + \frac{2}{1} + \frac{2}{3}$$

MINIMO COMUNE DENOMINATORE $(5 ; 1 ; 3)$

= MINIMO COMUNE MULTIPLO (m.c.m)

1) SCOMPORRE IN FATTORI PRIMI

$5 = 5 = 5^1$

$1 = 1$

$3 = 3 = 3^1$

$1 = 1$

$3 = 3 = 3^{1}$

$mcm = 3 \cdot 5 = 15$

$$\frac{4}{5} + \frac{2}{1} + \frac{2}{3}$$

$$\frac{4 \cdot \frac{15}{5} + 2 \cdot \frac{15}{1} + 2 \cdot \frac{15}{3}}{15}$$

$$\frac{4 \cdot 3 + 2 \cdot 15 + 2 \cdot 5}{15} \rightarrow 12 + 30 + 10 = 52$$

$$\frac{52}{15} \rightarrow 3 \cdot 5$$

52	2
26	2
13	13
1	

$$= \frac{2^2 \cdot 13}{3 \cdot 5}$$

• 406 $\left(\frac{4}{5} + 2 + \frac{2}{3}\right) - \left\{\frac{10}{3} - \left[\frac{7}{5} - \left(\frac{4}{5} + \frac{2}{3} - \frac{19}{15}\right)\right]\right\} - \left[\left(2 - \frac{2}{3}\right) - \frac{4}{5}\right]$ $\frac{4}{5}$

$$\frac{52}{15}$$

$$\frac{4 \cdot 3 + 2 \cdot 5 - 19}{15} \rightarrow 12 + 10 - 19 = 3$$

$$\frac{3}{15} = \frac{1}{5}$$

$$\left\{\frac{10}{3}-\left[\frac{7}{5}-\frac{1}{5}\right]\right\}=$$

$$\left\{\frac{10}{3}-\frac{6}{5}\right\}=\frac{10\cdot 5-6\cdot 3}{15}=$$

$$\frac{50-18}{15}=\frac{32}{15}$$

• **406** $\left(\frac{4}{5}+2+\frac{2}{3}\right)-\left\{\frac{10}{3}-\left[\frac{7}{5}-\left(\frac{4}{5}+\frac{2}{3}-\frac{19}{15}\right)\right]\right\}-\left[\left(2-\frac{2}{3}\right)-\frac{4}{5}\right]$ $\frac{4}{5}$

$\frac{52}{15}$ − $\frac{32}{15}$

$$\left(\frac{2}{1}-\frac{2}{3}\right)-\frac{4}{5}$$

$$\frac{2\cdot 3-2}{3}-\frac{4}{5}$$

$$\frac{4}{3}-\frac{4}{5}=$$

$$\frac{4\cdot 5-4\cdot 3}{15}=$$

$$\frac{20-12}{15}=\frac{8}{15}$$

$$\frac{52}{15}-\frac{32}{15}-\frac{8}{15}=$$

$$\frac{52-32-8}{15}=\frac{12}{15}=\frac{3\cdot 2^2}{3\cdot 5}$$

$$= \frac{12}{15} = \frac{3 \cdot 4}{3 \cdot 5}$$

$$= \frac{\cancel{12}^{\,4}}{\cancel{15}_{\,5}} = \frac{4}{5}$$