Expressão - EXP001

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Sumário

Expressão

$$\frac{\frac{1}{3}+\frac{2}{3}-\frac{2}{6}}{\frac{2}{3}+\frac{5}{7}-\frac{3}{2}}$$

Expressão

$$\frac{(\frac{1}{3}+\frac{2}{3}-\frac{2}{6})}{(\frac{2}{3}+\frac{5}{7}-\frac{3}{2})}$$

$$\frac{\frac{1}{3}+\frac{2}{3}-\frac{2}{6}}{\frac{2}{3}+\frac{5}{7}-\frac{3}{2}}$$

separar em partes

$$\frac{n}{d}$$

$$\frac{\frac{1}{3}+\frac{2}{3}-\frac{2}{6}}{\frac{2}{3}+\frac{5}{7}-\frac{3}{2}}$$

resolvendo apenas o numerador

$$\frac{n}{d}$$

$$n = (\frac{1}{3}+\frac{2}{3}-\frac{2}{6})$$

$$\frac{\frac{1}{3}+\frac{2}{3}-\frac{2}{6}}{\frac{2}{3}+\frac{5}{7}-\frac{3}{2}}$$

simplificar $\frac{2}{6}=\frac{1}{3}$

$$\frac{n}{d}$$

$$n=(\frac{1}{3}+\frac{2}{3}-\frac{2}{6})$$

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

$$\frac{\frac{1}{3}+\frac{2}{3}-\frac{2}{6}}{\frac{2}{3}+\frac{5}{7}-\frac{3}{2}}$$

$$\frac{n}{d}$$

$$n=(\frac{1}{3}+\frac{2}{3}-\frac{2}{6})$$

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

$$n=\frac{(1+2-1)}{3}$$

$$\frac{\frac{1}{3}+\frac{2}{3}-\frac{2}{6}}{\frac{2}{3}+\frac{5}{7}-\frac{3}{2}}$$

$$n = \frac{2}{3} \quad (1)$$

$$n = (\frac{1}{3}+\frac{2}{3}-\frac{2}{6})$$

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

$$n = \frac{(1+2-1)}{3}$$

$$n = \frac{2}{3} \quad (1)$$

$$\frac{\frac{1}{3}+\frac{2}{3}-\frac{2}{6}}{\frac{2}{3}+\frac{5}{7}-\frac{3}{2}}$$

$$n = \frac{2}{3} \quad (1)$$

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

$$n = \frac{(1+2-1)}{3}$$

$$n = \frac{2}{3} \quad (1)$$

$$d = \left(\frac{2}{3} + \frac{5}{7} - \frac{3}{2}\right)$$

resolvendo apenas o denominador

$$\frac{\frac{1}{3}+\frac{2}{3}-\frac{2}{6}}{\frac{2}{3}+\frac{5}{7}-\frac{3}{2}}$$

$$n = \frac{2}{3} \quad (1)$$

$$n = \frac{(1+2-1)}{3}$$

$$n = \frac{2}{3} \quad (1)$$

$$d = \left(\frac{2}{3}+\frac{5}{7}-\frac{3}{2}\right)$$

$$d = \frac{(7\cdot 2)}{(7\cdot 3)}+\frac{(3\cdot 5)}{(3\cdot 7)}-\frac{(7\cdot 3)}{(7\cdot 2)}$$

multiplicamos para igualar denominadores (QRM001)

$$\frac{\frac{1}{3}+\frac{2}{3}-\frac{2}{6}}{\frac{2}{3}+\frac{5}{7}-\frac{3}{2}}$$

$$n = \frac{2}{3} \quad (1)$$

$$n = \frac{2}{3} \quad (1)$$

$$d = \left(\frac{2}{3} + \frac{5}{7} - \frac{3}{2}\right)$$

$$d = \frac{(7 \cdot 2)}{(7 \cdot 3)} + \frac{(3 \cdot 5)}{(3 \cdot 7)} - \frac{(7 \cdot 3)}{(7 \cdot 2)}$$

$$d = \frac{14}{7 * 3} + \frac{15}{3 * 7} - \frac{21}{7 * 2}$$

$$\frac{\frac{1}{3}+\frac{2}{3}-\frac{2}{6}}{\frac{2}{3}+\frac{5}{7}-\frac{3}{2}}$$

$$n = \frac{2}{3} \quad (1)$$

$$d = \left(\frac{2}{3}+\frac{5}{7}-\frac{3}{2}\right)$$

$$d = \frac{(7\cdot 2)}{(7\cdot 3)}+\frac{(3\cdot 5)}{(3\cdot 7)}-\frac{(7\cdot 3)}{(7\cdot 2)}$$

$$d = \frac{14}{7*3}+\frac{15}{3*7}-\frac{21}{7*2}$$

$$d = \frac{(2\cdot 14)}{(2\cdot 7\cdot 3)}+\frac{(2\cdot 15)}{(2\cdot 3\cdot 7)}-\frac{(3\cdot 21)}{(3\cdot 7\cdot 2)}$$

multiplicamos para igualar denominadores (QRM001)

$$\frac{\frac{1}{3}+\frac{2}{3}-\frac{2}{6}}{\frac{2}{3}+\frac{5}{7}-\frac{3}{2}}$$

$$n=\frac{2}{3}\quad(1)$$

$$d=\frac{(7\cdot 2)}{(7\cdot 3)}+\frac{(3\cdot 5)}{(3\cdot 7)}-\frac{(7\cdot 3)}{(7\cdot 2)}$$

$$d=\frac{14}{7*3}+\frac{15}{3*7}-\frac{21}{7*2}$$

$$d=\frac{(2\cdot 14)}{(2\cdot 7\cdot 3)}+\frac{(2\cdot 15)}{(2\cdot 3\cdot 7)}-\frac{(3\cdot 21)}{(3\cdot 7\cdot 2)}$$

$$d=\frac{28}{2*7*3}+\frac{30}{2*3*7}-\frac{63}{3*7*2}$$

$$\frac{\frac{1}{3}+\frac{2}{3}-\frac{2}{6}}{\frac{2}{3}+\frac{5}{7}-\frac{3}{2}}$$

$$n=\frac{2}{3} \quad (1)$$

$$d=\frac{14}{7*3}+\frac{15}{3*7}-\frac{21}{7*2}$$

$$d=\frac{(2\cdot 14)}{(2\cdot 7\cdot 3)}+\frac{(2\cdot 15)}{(2\cdot 3\cdot 7)}-\frac{(3\cdot 21)}{(3\cdot 7\cdot 2)}$$

$$d=\frac{28}{2*7*3}+\frac{30}{2*3*7}-\frac{63}{3*7*2}$$

$$d=\frac{(28+30-63)}{(2\cdot 3\cdot 7)}$$

$$\frac{\frac{1}{3}+\frac{2}{3}-\frac{2}{6}}{\frac{2}{3}+\frac{5}{7}-\frac{3}{2}}$$

$$n=\frac{2}{3} \quad (1)$$

$$d=\frac{(2\cdot 14)}{(2\cdot 7\cdot 3)}+\frac{(2\cdot 15)}{(2\cdot 3\cdot 7)}-\frac{(3\cdot 21)}{(3\cdot 7\cdot 2)}$$

$$d=\frac{28}{2*7*3}+\frac{30}{2*3*7}-\frac{63}{3*7*2}$$

$$d=\frac{(28+30-63)}{(2\cdot 3\cdot 7)}$$

$$d=\frac{-5}{2*3*7} \quad (2)$$

$$\frac{1}{3} + \frac{2}{3} - \frac{2}{6}$$
$$\frac{2}{3} + \frac{5}{7} - \frac{3}{2}$$

$$n = \frac{2}{3} \quad (1)$$

$$d = \frac{28}{2 * 7 * 3} + \frac{30}{2 * 3 * 7} - \frac{63}{3 * 7 * 2}$$

$$d = \frac{(28 + 30 - 63)}{(2 \cdot 3 \cdot 7)}$$

$$d = \frac{-5}{2 * 3 * 7} \quad (2)$$

$$\frac{n}{d}$$

juntando as partes
$\frac{n}{d}$

$$\frac{\frac{1}{3}+\frac{2}{3}-\frac{2}{6}}{\frac{2}{3}+\frac{5}{7}-\frac{3}{2}}$$

$$n = \frac{2}{3} \quad (1)$$

$$d = \frac{(28+30-63)}{(2\cdot 3\cdot 7)}$$

$$d = \frac{-5}{2*3*7} \quad (2)$$

$$\frac{n}{d}$$

$$\frac{\frac{2}{3}}{\frac{-5}{2*3*7}}$$

$$\frac{\frac{1}{3}+\frac{2}{3}-\frac{2}{6}}{\frac{2}{3}+\frac{5}{7}-\frac{3}{2}}$$

$$n = \frac{2}{3} \quad (1)$$

$$d = \frac{-5}{2*3*7} \quad (2)$$

$$\frac{n}{d}$$

$$\frac{\frac{2}{3}}{\frac{-5}{2*3*7}}$$

$$\frac{2}{3} * \frac{2*3*7}{-5}$$

divisão igual ao inverso da multiplicação (QRM002)

$$\frac{\frac{1}{3}+\frac{2}{3}-\frac{2}{6}}{\frac{2}{3}+\frac{5}{7}-\frac{3}{2}}$$

$$n = \frac{2}{3} \quad (1)$$

$$\frac{n}{d}$$

$$\frac{\frac{2}{3}}{\frac{-5}{2*3*7}}$$

$$\frac{2}{3} * \frac{2*3*7}{-5}$$

$$-\frac{2*2*3*7}{3*5}$$

sinal do 5 vai para a fração (QRM003)

$$\frac{\frac{1}{3}+\frac{2}{3}-\frac{2}{6}}{\frac{2}{3}+\frac{5}{7}-\frac{3}{2}}$$

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

$$n=\frac{2}{3} \quad (1)$$

$$\frac{\frac{2}{3}}{\frac{-5}{2*3*7}}$$

$$\frac{2}{3}*\frac{2*3*7}{-5}$$

$$-\frac{2*2*3*7}{3*5}$$

$$\frac{2*2*7}{-5}$$

$$\frac{\frac{1}{3}+\frac{2}{3}-\frac{2}{6}}{\frac{2}{3}+\frac{5}{7}-\frac{3}{2}}$$

$$n=\frac{2}{3} \quad (1)$$

$$\frac{2}{3} * \frac{2*3*7}{-5}$$

$$-\frac{2*2*3*7}{3*5}$$

$$\frac{2*2*7}{-5}$$

$$-\frac{28}{5}$$

Resultado

Expressão:

$$\frac{\frac{1}{3}+\frac{2}{3}-\frac{2}{6}}{\frac{2}{3}+\frac{5}{7}-\frac{3}{2}}$$

Resposta: $-\frac{28}{5}$

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