

Izračunajte $\left(\frac{1}{2} + \frac{1}{a}\right) \frac{2a}{a-4a^{-1}} = \left(\frac{1}{2} + \frac{1}{a}\right) \cdot \frac{2a}{a - \frac{4}{a}} = \frac{2a+2a}{2a - \frac{4}{a} + \frac{4}{a} + \frac{4}{a^2}}$

$$= \frac{2a}{a-4} = \frac{2a}{2a-4}$$

Izračunajte $\left(\frac{1}{2} + \frac{1}{a}\right) \frac{2a}{a-4a^{-1}} = \frac{a+2}{2a} \cdot \frac{2a}{a-\frac{4}{a}} = \frac{a+2}{2a} \cdot \frac{2a^2}{a^2-4}$

$$= \frac{(a+2) 2a^2}{2a(a-2)(a+2)} = \frac{2a}{a-2}$$

Izračunajte $\left(\frac{1}{2} + \frac{1}{a}\right) \frac{2a}{a-4a^{-1}} = \frac{1a+2}{2a} \cdot \frac{2a}{a-\frac{4}{a}} = \frac{1a+2}{2a} \cdot \frac{2a^2}{a^2-4} = \frac{1a+2}{2a} \cdot \frac{2a^2}{(a-2)(a+2)} = \frac{a}{a-2}$

Izračunajte $\left(\frac{1}{2} + \frac{1}{a}\right) \frac{2a}{a-4a^{-1}} = \frac{a+2}{2a} \cdot \frac{2a}{a-4a^{-1}} \rightarrow 2$

Izračunajte $\left(\frac{1}{2} + \frac{1}{a}\right) \frac{2a}{a-4a^{-1}} = \frac{2a+2a}{2a^2 - 8a^{-1} + a^2 - 5a^{-1}} = \frac{A}{a(2-\frac{1}{a})} + \frac{B}{a(a^2-5)}$

Izračunajte $\left(\frac{1}{2} + \frac{1}{a}\right) \frac{2a}{a-4a^{-1}} = \frac{a+2}{2a} \cdot \frac{2a}{a-4a^{-1}}$

$= \frac{a+2}{a-4a^{-1}}$

$= \frac{a+2}{-5a}$

Izračunajte $\left(\frac{1}{2} + \frac{1}{a}\right) \frac{2a}{a-4a^{-1}} = \frac{1a + (2+1) \cdot 2a}{2+a} \cdot \frac{2a}{a-4a^{-1}} =$

$= \frac{a + 3 \cdot 4a}{2+a} \cdot \frac{2a}{a(-2a)} =$

$= \frac{a + 15a}{2+a} \cdot \frac{2a}{a(-2a^2)} =$

$= \frac{16a}{2 - 2a^3} = \frac{16a}{2-2a^3}$

Izračunajte $\left(\frac{1}{2} + \frac{1}{a}\right) \frac{2a}{a-4a^{-1}} = \left(\frac{a-2}{2a+2a} \cdot \frac{2a}{a-\frac{4}{a}}\right) =$

$= \frac{2a}{2a} \cdot \frac{2a}{\frac{a-4}{a}} = \frac{2a}{1} \cdot \frac{a}{4a-4}$

$= \frac{2a}{2a} \cdot \frac{2a}{1} \cdot \frac{a}{4a-4}$

Izračunajte $\left(\frac{1}{2} + \frac{1}{a}\right) \frac{2a}{a-4a^{-1}} = \frac{(a+2)2a^2}{2a(a-2)(a+2)} = \frac{a}{a-2}$

$\frac{a}{a-2}$



Izračunajte $\left(\frac{1}{2} + \frac{1}{a}\right) \frac{2a}{a - 4a^{-1}} =$

$$= \left(\frac{1}{2} + \frac{1}{a}\right) \frac{2a}{a - \frac{4}{a}} =$$

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

$$= \left(\frac{a+2 \cdot 2a}{2a \cdot (a-2)(a+2)}\right) =$$

$$= \underline{\underline{\frac{1}{a-2}}}$$

Izračunajte $\left(\frac{1}{2} + \frac{1}{a}\right) \frac{2a}{a - 4a^{-1}} = \frac{1+2}{2 \cdot 2a} \cdot \frac{2a}{a - \frac{4}{a}} =$

$$= \frac{3}{2}$$

Izračunajte $\left(\frac{1}{2} + \frac{1}{a}\right) \frac{2a}{a - 4a^{-1}} = \left(\frac{1}{2} + \frac{1}{a}\right) \cdot \frac{2a}{a - \frac{4}{a}} =$

$$=$$

Izračunajte $\left(\frac{1}{a} + \frac{1}{3}\right) \frac{3a}{a-9a^{-1}} = \left(\frac{3+a}{3a}\right) \cdot \frac{3a}{a-9a^{-1}} = \frac{(3+a) \cdot 3a \cdot 1}{3a \cdot (a-9a^{-1})} = \frac{(3+a) \cdot 3a}{3a \cdot (a-9a^{-1})} = \frac{3+a}{a-9a^{-1}} = \frac{3+a}{a-\frac{9}{a}} = \frac{3+a}{\frac{a^2-9}{a}} = \frac{(3+a) \cdot a}{a^2-9} = \frac{3a+4a}{24a} = \frac{7a}{24a} = \frac{7}{24}$

Krajnja
 $\frac{3 \cdot 4}{4 \cdot 3} = \frac{12}{12} = 1$

Izračunajte $\left(\frac{1}{a} + \frac{1}{3}\right) \frac{3a}{a-9a^{-1}} =$

3a
 $\frac{3a}{3a} \cdot \frac{3a}{a-9a^{-1}} =$
 $= \frac{3a^2}{a-9}$

Izračunajte $\left(\frac{1}{a} + \frac{1}{3}\right) \frac{3a}{a-9a^{-1}} = \frac{A-B}{3a-a}$

$\frac{1}{a} + \frac{1}{3} = \frac{3+a}{3a}$
 $\frac{3a}{a-9a^{-1}} = \frac{3a^2}{a^2-9}$
 $\frac{3a+4a}{24a} = \frac{7a}{24a} = \frac{7}{24}$

Izračunajte $\left(\frac{1}{a} + \frac{1}{3}\right) \frac{3a}{a-9a^{-1}} = \left(\frac{1}{a} + \frac{1}{3}\right) \frac{3a \cdot 9a}{a - \frac{1}{9a} \cdot 9a}$

$= \left(\frac{1}{a} + \frac{1}{3}\right) \frac{27a^2}{a-1} = \left(\frac{1}{a} + \frac{1}{3}\right) \cdot 27a^3$

||

Izračunajte $\left(\frac{1}{a} + \frac{1}{3}\right) \frac{3a}{a-9a^{-1}} =$

$$\frac{a+b}{c} = \frac{a}{c} + \frac{b}{c}$$

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

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

Križanje

Izračunajte $\left(\frac{1}{a} + \frac{1}{3}\right) \frac{3a}{a-9a^{-1}} = \frac{3+a}{3a} \cdot \frac{3a}{a - \frac{9}{a}} = \frac{a(3+a)}{a(a - \frac{9}{a})} = \frac{3a+a^2}{a^2-9} =$

$$= \frac{a(a+3)}{(a+3)(a-3)} = \frac{a}{a-3}$$

Izračunajte $\left(\frac{1}{a} + \frac{1}{3}\right) \frac{3a}{a-9a^{-1}} = \frac{(1 \cdot 3) + (1 \cdot a)}{a+3} \cdot \frac{3a}{a - \frac{1}{9a}} =$

$$= \frac{3a}{3a} \cdot \frac{3a}{\frac{1}{9a}} = 1 \cdot \frac{3a}{\frac{1}{9a}} =$$

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

Izračunajte $\left(\frac{1}{a} + \frac{1}{3}\right) \frac{3a}{a-9a^{-1}} =$

$$= \left(\frac{1}{a} + \frac{1}{3}\right) \frac{3a-9a}{a} =$$

=

Izračunajte $\left(\frac{1}{a} + \frac{1}{3}\right) \frac{3a}{a - 9a^{-1}} =$

$$= \frac{\cancel{a+3}}{a+3}$$

$$\left(\frac{a+3}{3a}\right) \frac{\cancel{3a}}{a-9a^{-1}} \cdot a =$$

$$\left(\frac{(a+3)}{(3a)}\right) \frac{3a}{a-9a^{-1}} \cdot a =$$

$$= \left(\frac{(a+3)}{(3a)}\right) \frac{3a^2}{a^2-9} =$$

$$= \left(\frac{(a+3)}{1}\right) \frac{a}{(a-3)(a+3)} =$$

$$= \frac{a}{a-3}$$

Izračunajte $\left(\frac{1}{a} + \frac{1}{3}\right) \frac{3a}{a - 9a^{-1}} = \frac{\cancel{10}}{\cancel{3a}} \frac{\cancel{3a}}{\cancel{(a+3)}} \frac{\cancel{1}}{\cancel{(a-3)^2}} = \frac{1}{3a} \frac{(a+3)^2}{3a} =$

$$= \frac{\cancel{10} \cancel{(a+3)}}{\cancel{3a}} \frac{1(a-9a)}{\cancel{3a}}$$

Izračunajte $\left(\frac{1}{a} + \frac{1}{3}\right) \frac{3a}{a - 9a^{-1}} =$

$$\frac{\cancel{3+a}}{\cancel{3a}} \frac{\overset{\frac{9}{a} \cdot a}{3a}}{a^2 - 9} = \frac{a}{a-3}$$

✓

Izračunajte $\left(\frac{1}{a} + \frac{1}{3}\right) \frac{3a}{a - 9a^{-1}} = \left(\frac{3a}{3a}\right) \cdot \frac{3a}{a - \frac{9}{a}} =$

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

~~3a~~

$$\frac{(a+3)(a-3)}{a}$$

$$= \frac{a(3+a)}{a(3+a)} \cdot \frac{3a \cdot a}{(a+3)(a-3)} = \frac{a}{(a-3)}$$

✓

Izračunajte $\left(\frac{1}{a} + \frac{1}{3}\right) \frac{3a}{a - 9a^{-1}} = \left(\frac{\cancel{3a} + 1a}{\cancel{3a} + 3}\right) \frac{\cancel{3a}}{\cancel{3a}}$

$$\frac{3a}{a - \frac{9}{a}} = \left(\frac{3a}{-9}\right)$$