

Algebraalisk murdude liitmine ja lahutamise.

Sarnane kordlike murdudega

• kui sarnased ~~alused~~ (nimetajad)

$$\frac{1}{4} + \frac{2}{4} = \frac{1+2}{4}$$

• kui erinevad ~~alused~~ (nimetajad)

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

$$\frac{1}{3} + \frac{1}{15} = \frac{1 \cdot 15 + 3 \cdot 1}{3 \cdot 15} = \frac{15+3}{45}$$

Kui ei suuda leida ühise nimetajat, siis lihtsam ongi leida nimetajate korrutis.

Näide:
$$\frac{t-4}{2} + \frac{3t-5}{14} = \frac{7 \cdot (t-4) + (3t-5)}{14} = \frac{(7t) - 28 + 3t - 5}{14} = \frac{10t - 33}{14}$$

$$\frac{2 \cdot \overset{4y}{x+y}}{\overset{6xy}{6xy}} + \frac{3x \cdot \overset{4y}{2x-y}}{\overset{6xy}{4y}}$$

$$\frac{2 \cdot (x+y) + 3x(2x-y)}{12xy} = \frac{2x+2y+6x^2-3xy}{12xy}$$

→ jääbki nii

$$\frac{4y(x+y) + 6xy(2x-y)}{6xy \cdot 4y} = \frac{4xy + 4y^2 + 12x^2y - 6xy^2}{24xy^2}$$

$$= \frac{2y(2x+2y+6x^2-3xy)}{24xy^2}$$

siin saad 2 ja xy sulgude ette tulla

Mõlemat pidi tuleb õige vastus.

Atsusta ise kummaga sulle meeldib

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

Lahenda.

$$\textcircled{1.} \quad \frac{5}{24b} + \frac{3b-1}{6b} =$$

$$\textcircled{2.} \quad \frac{2y-3}{7} - \frac{3y+1}{14} =$$

$$\textcircled{3.} \quad \frac{a-b}{3a} - \frac{2a+b}{5ab}$$

$$\textcircled{4.} \quad \frac{a}{a-b} - \frac{b}{a+b}$$

$$\textcircled{5.} \quad \frac{s}{2s+2t} + \frac{t}{3s-3t} =$$

$$\textcircled{6.} \quad \frac{1}{a+b} + \frac{b^2}{a^2-b^2} =$$

$$\textcircled{7.} \quad \frac{u}{4u+2v^2} - \frac{4v}{u^2+2uv} =$$

$$\textcircled{8.} \quad 3u - \frac{12u^2-3v^2}{4u-2v}$$

$$\textcircled{9.} \quad \frac{2}{x^2-10x+25} - \frac{1}{x-5}$$

$$\textcircled{10.} \quad \frac{2}{x^2-4} - \frac{2}{x^2-2x} =$$

$$\textcircled{11.} \quad \frac{4a+12}{a^2-3a} + \frac{4a}{9-a^2} =$$