

## Algebrai törtek

1. Végezzük el a következő műveleteket!

$$a) \frac{1}{a+b} + \frac{1}{a-b} \quad \boxed{\frac{(q-v)(q+v)}{vz}} \quad b) \frac{b}{a-b} - \frac{a}{b-a} \quad \boxed{\frac{q-v}{v+q}}$$

$$c) \frac{2x}{3(x-1)} + \frac{5x}{x-1} \quad \boxed{\frac{(1-x)\xi}{x21}} \quad d) \frac{2a}{5a+5b} + \frac{3a}{5a-5b} \quad \boxed{\frac{(v+q)(v-q)\xi}{(v\xi+q)v-}}$$

$$e) \frac{5b}{ax+ay} - \frac{2a}{bx+by} \quad \boxed{\frac{(h+x)qv}{z^vz - z^q\xi}} \quad f) \frac{x+1}{x^2-x} - \frac{x+2}{2x^2-2} \quad \boxed{\frac{(1+x)x(1-x)z}{z+xz+z^x}}$$

$$g) \frac{7a-1}{2a^2+6a} + \frac{5-3a}{a^2-9} \quad \boxed{\frac{(\xi+v)v(\xi-v)z}{\xi+vz1 - z^v}} \quad h) \frac{3}{2a+6} - \frac{a-2}{a^2+6a+9} \quad \boxed{\frac{z(\xi+v)z}{\xi1+v}}$$

$$i) \frac{5+b}{b^2-8b+16} + \frac{6}{5b-20} \quad \boxed{\frac{z(\eta-q)\xi}{1+q11}} \quad j) \frac{5}{2x-4} - \frac{3}{x+2} - \frac{12}{x^2-4} \quad \boxed{\frac{(z-x)z}{1-}}$$

$$k) \frac{5x}{ab} + \frac{2y}{3a^2b} - \frac{3}{6a^2y^2} \quad \boxed{\frac{z^h q z^v \eta}{q\xi - z^h x v \eta \xi + \xi^h \eta}} \quad l) \frac{5}{2a^2+6a} - \frac{4-3a^2}{a^2-9} - 3 \quad \boxed{\frac{(\xi+v)v(\xi-v)z}{(\xi-vz1)\xi}}$$

$$m) \frac{2}{x+2} + \frac{x+3}{x^2-4} \quad \boxed{\frac{(z+x)(z-x)}{1-x\xi}} \quad n) \frac{5}{x-3} - \frac{x-2}{x^2-9} + \frac{x-1}{2x+6} \quad \boxed{\frac{(\xi+x)(\xi-x)z}{2\xi+x\eta+z^x}}$$

$$o) \frac{1}{x-1} + \frac{2}{x+1} - \frac{3x}{(x-1)^2} \quad \boxed{\frac{(1+x)z(1-x)}{1+xz-}} \quad p) \frac{7}{a} - \frac{4}{a-2b} - \frac{a-b}{4b^2-a^2} \quad \boxed{\frac{(v+qz)(v-qz)v}{(v\eta+qz)(v-q\eta)}}$$

$$q) \frac{x^2-2ax}{a+x} + a+x \quad \boxed{\frac{v+x}{z^v+z^x z}}$$

$$r) \frac{3x+2}{x^2-2x+1} - \frac{6}{x^2-1} - \frac{3x-2}{x^2+2x+1} \quad \boxed{\frac{z(1+x)z(1-x)}{(1+z^x)01}}$$

$$s) \frac{7}{8a^2-18b^2} + \frac{1}{2a^2+3ab} - \frac{1}{4ab-6b^2} \quad \boxed{\frac{(vz+q\xi)(vz-q\xi)qv}{(v-q\xi)(v-q)}}$$