

$$\frac{\frac{u-v}{u+v} - \frac{u}{u-v}}{\frac{u+v}{u-v} - \frac{v}{u+v}}$$

vereinfachen, kürzen

Lösung:

$$\frac{\frac{u-v}{u+v} - \frac{u}{u-v}}{\frac{u+v}{u-v} - \frac{v}{u+v}}$$

erweitern

$$\frac{\frac{(u-v)(u-v)}{(u+v)(u-v)} - \frac{u(u+v)}{(u-v)(u+v)}}{\frac{(u+v)(u+v)}{(u-v)(u+v)} - \frac{v(u-v)}{(u+v)(u-v)}}$$

umformen

$$\frac{\frac{(u-v)(u-v) - u(u+v)}{(u+v)(u-v)}}{\frac{(u+v)(u+v) - v(u-v)}{(u-v)(u+v)}}$$

kürzen

$$\frac{(u-v)(u-v) - u(u+v)}{(u+v)(u-v) - v(u-v)}$$

ausrechnen

$$\frac{u^2 - 2uv + v^2 - u^2 - uv}{u^2 + 2uv + v^2 - uv + v^2}$$

umformen

$$\frac{-3uv + v^2}{u^2 + uv + 2v^2}$$