

BRUCHTERME - LÖSUNGEN

$$1. \frac{x}{3x^2y} - \frac{y}{2xy^2} = \frac{-xy}{6x^2y^2} = -\frac{1}{6xy}$$

$$2. \frac{u}{u-v} - \frac{v}{(u-v)^2} = \frac{u(u-v) - v}{(u-v)^2} = \frac{u^2 - uv - v}{(u-v)^2}$$

$$3. \frac{a}{a-b} - \frac{b}{a+b} = \frac{a(a+b) - b(a-b)}{a^2 - b^2} = \frac{a^2 + b^2}{a^2 - b^2}$$

$$4. \frac{s}{2} - \frac{t}{s-t} = \frac{s(s-t) - 2t}{2(s-t)} = \frac{s^2 - st - 2t}{2(s-t)}$$

$$5. \frac{u}{u+v} - \frac{v}{u^2 - v^2} = \frac{u(u-v) - v}{u^2 - v^2} = \frac{u^2 - uv - v}{u^2 - v^2}$$

$$6. \frac{2a+3}{6a-4} - \frac{5-4a}{9a+6} - \frac{62-12a^2-7a}{24-54a^2} = 1$$

$$7. \frac{2m^2 - 12n^2}{m^2 - 16n^2} - \frac{2m - 3n}{2m - 8n} - 1 = -\frac{5n}{2(m+4n)}$$

$$8. \frac{3u-8}{u^2-8u+16} - \frac{2u+12}{u^2-16} - \frac{1}{2u+8} = \frac{u+4}{2(u-4)^2}$$

$$9. \frac{1}{r-1} - \frac{1}{r+1} + \frac{2}{1-r^2} - 1 = -1$$

$$10. \frac{2s}{4s^2-1} - \frac{s}{4s^2-4s+1} - \frac{1}{4s+2} = \frac{-1}{2(2s-1)^2}$$