

$$1. \frac{1 - \frac{x+a}{x-b}}{1 - \frac{x-a}{x+b}} + \frac{3bx-x^2}{bx-b^2} =$$

$$2. \frac{a^2-2abc+(bc)^2}{\frac{a}{c} \frac{a+ab}{a+c}} \cdot \left( \frac{1}{c} + \frac{b}{a-bc} \right) =$$

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

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

$$5. \left[ \frac{1}{\frac{a^2}{4} - b^2} : \left( \frac{5}{a+2b} + 2 \right) \right] \cdot [(a+2b+5)^2 - (a+2b)^2] =$$

$$6. \frac{1}{\frac{1}{m-1} + m + 1} \cdot \frac{m-1 - \frac{m(m-1)}{m+1}}{\frac{1}{m^2-1} - \frac{2m}{m^4-1}} =$$

$$7. \left( \frac{\frac{a-3b}{a^2-b^2}}{\frac{a}{a+b}} + \frac{\frac{3ab-b^2}{a^2-2ab+b^2}}{\frac{b^2}{a-b}} \right) \cdot \frac{1}{1 + \frac{a}{b}} =$$

$$8. \frac{\frac{\frac{r}{r+s} + \frac{s}{r-s}}{1} + (s^2 - 1) \cdot \left( \frac{s}{s+1} + \frac{1}{s-1} - \frac{1}{s^2-1} \right)}{(r+s)^2 + (r-s)^2} =$$

$$9. \frac{\frac{b}{b^2-1}}{\frac{1}{b+1} \frac{1}{b-1}} : \frac{\frac{2b}{b-3} \frac{b}{b+4}}{1 + \frac{23-b^2}{b^2+b-12}} =$$

$$10. \frac{(a+3)^2 - (a+2)^2 - 5}{\frac{a^2-b^2}{a-b}} + \frac{\frac{(a-2b)^2 - a^2}{2(b-a)}}{\frac{a^2+2a+ab+2b}{a+2}} =$$

$$11. \frac{\frac{\frac{1}{x} + \frac{1}{3}}{1 + \frac{1}{3}}}{\frac{1}{a-b}}}{\frac{1}{2ax+ay-b(x+y)}} =$$

$$12. \frac{\frac{\frac{2}{x-1} \frac{1}{x-2}}{\frac{x-3}{4}}}{x - \frac{4}{x}} : \frac{x-5}{x^2-6x+5} =$$

$$13. \frac{ax+3a^2}{x^2+6ax+9a^2} + \frac{\left(x+\frac{1}{2}\right)^2 - \left(x-\frac{1}{2}\right)^2 + 5a}{\frac{x^2-9a^2}{x-3a}} =$$

$$14. \frac{\frac{14x^3-2x^2y}{7x-y}}{\frac{x^2-y^2}{x(y+1)-y(x+1)}} - \frac{y^2}{\frac{x^2+2xy+y^2}{2x+2y}} =$$

$$15. \frac{\frac{x^3-12x^2+35x}{x^3-2x^2-35x}}{-\frac{21}{4} + \left(x+\frac{1}{2}\right)^2 - x^2} + \frac{5-x}{x^2-25} =$$

$$16. \frac{\left(x+\frac{1}{2}\right)(2x+1) - \frac{1}{2}}{\frac{x(a+z)+3a+3z}{a+z}} : \frac{(x^2-1)x}{x^2+2x-3} =$$