

$$1. \frac{4}{x} \cdot \frac{1}{x} =$$

$$2. \frac{5x^2}{2y^3} \cdot \frac{4y^2}{15x} =$$

$$3. \frac{3y-6}{3x} \cdot \frac{6x^2}{5y-10} =$$

$$4. \frac{2r^2}{s} : \frac{3s}{4r} =$$

$$5. \frac{5}{2c} : bc =$$

$$6. \frac{2ab}{a+1} : \frac{b^2}{2a+2} =$$

$$7. \frac{p}{q^2} \cdot \frac{4pq}{p^2} =$$

$$8. x^3 \cdot \frac{x+2}{2x+x^2} =$$

$$9. \frac{2x^2}{3y} : \frac{4x^2}{15y^2} =$$

$$10. \frac{2x}{5y} \cdot \frac{3y^2}{x^3} =$$

$$11. \frac{ab-a}{6ab^3} \cdot \frac{9abc}{b-1} =$$

$$12. \frac{x-y}{3y-6} : \frac{(x-y)^2}{6y} =$$

$$13. \frac{4m^4}{kl^2} : \frac{8m^3}{k(m+1)} =$$

$$14. \frac{6xyz}{1+y} \cdot \frac{x+xy}{9x^3y} =$$

$$15. \frac{(m+n)^2}{6m} : \frac{m+n}{3m-6} =$$

$$16. \frac{x^2-1}{x^2+xy} \cdot \frac{x^2+2xy+y^2}{(x+1)^2} \cdot \frac{x^2+x}{xy-y} =$$

$$17. \frac{(a+b)^2}{a^2-b^2} : \frac{a^2+b^2}{(a-b)^2} =$$

$$18. \frac{\frac{a+1}{6ab}}{\frac{2a+2}{3b^2}} =$$

$$19. \frac{1-a}{5b} \cdot \frac{b^2}{1-a^2} =$$

$$20. \frac{12a^2b^3}{5c^2} \cdot \frac{10c}{9a^2} \cdot \frac{bc}{2a} =$$

$$21. \frac{\frac{1+b}{a-b}}{\frac{b^2-1}{a^2-b^2}} =$$

$$22. \frac{\frac{x^2y^4}{xy+5y}}{\frac{2x^4y^2}{x^2+5x}} =$$

$$23. \frac{5x^3}{3} : \left(-\frac{10x^2}{9y}\right) =$$

$$24. \frac{a^2+ab}{b^2-ab} \cdot \frac{a^2-ab}{2b^2+2ab} =$$

$$25. \frac{a+3}{a-1} : \frac{2a+6}{a^2-a} =$$

$$26. \frac{a^2+b^2}{a^2-b^2} : \frac{5a^2+5b^2}{a+b} =$$

$$27. \left(\frac{r+s}{r-s} - \frac{r-s}{r+s}\right) \cdot \left(\frac{r}{s} - \frac{s}{r}\right) =$$

$$28. \frac{mn-n^2}{m^2-n^2} : \frac{n}{m^2+2mn+n^2} =$$

$$29. \left(\frac{1}{v} - \frac{1}{t}\right) : \left(\frac{1}{v} - 1\right) =$$

$$30. \left(\frac{3x}{2} + \frac{4x}{3}\right) \cdot \left(\frac{x}{17} + \frac{2}{x}\right) =$$

$$31. \frac{\frac{2a+4b}{x-y}}{\frac{a^2+4ab+4b^2}{x^2-y^2}} =$$

$$32. \frac{\frac{1}{m} + \frac{1}{n}}{1 + \frac{1}{n}} =$$

$$33. \left(x + \frac{x+x^2}{1-x}\right) : \left(x - \frac{x^2+x}{x-1}\right) =$$

$$34. \left(\frac{3}{x-1} - \frac{4}{x+1} - \frac{6}{x^2-1}\right) \cdot \frac{x+1}{x} =$$

$$35. \left(\frac{1}{u} - \frac{1}{r}\right) \cdot \frac{u}{r-u} =$$

$$36. (2x^2 - 18) \cdot \left(\frac{1}{x+3} - \frac{1}{x-3}\right) =$$

$$37. \frac{\frac{12a^2b^2c^2}{5cd}}{4ab^2} =$$

$$38. \frac{\frac{36a^3b^2d}{9ab^2d^3}}{c} =$$

$$39. \left(\frac{1}{1+a} - 1\right) \cdot \left(1 - \frac{1}{1-a}\right) =$$

$$40. \left(\frac{1}{a-b} - \frac{1}{a+b}\right) : \frac{2}{a-b} =$$