

$$1. \frac{(x+7)(x-7)8x^2}{6x^3 \cdot x(x+7)} = \frac{4(x-7)}{3xx} = \frac{4x-28}{3x^2}$$

$$2. \frac{(x-4)9x(x+4)}{-x^2(x+4)(4-x)} = \frac{9}{-x} \text{ or } -\frac{9}{x} \text{ or } -\frac{9}{x}$$

$$3. \frac{2(x+10)(x-10)7(x+3)}{4x(x-10)(x+10)(x-3)} = \frac{7(x+3)}{2x(x-3)} = \frac{7x+21}{2x^2-6x}$$

$$4. \frac{2x^3(x+9)(x-2)}{(x-9)(x-2)5x^2} = \frac{2x^3(x+9)}{5(x-9)} = \frac{2x^4+18x^3}{5x-45}$$

$$5. \frac{(5+x)(5-x)x^3(x+5)}{-5x^4(x-5)} = \frac{(5+x)(x+5)}{-5x} = \frac{x^2+10x+25}{-5x}$$

$$6. \frac{(x-8)(x+3)}{8x(x+1)(x+3)(x+3)} = \frac{x-8}{8x(x+1)(x+3)} = \frac{x-8}{8x^3+32x^2+24x}$$

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

$$8. \frac{(a-4b)(a-5b)(a+7b)}{(a+b)(a+7b)(a-4b)(a-4b)} = \frac{a-5b}{(a+b)(a-4b)} = \frac{a-5b}{a^2-3ab-4b^2}$$

$$9. \frac{(5-a)(2+a)5b^3}{60b \cdot 5ab(a+2)} = \frac{b^3(5-a)}{4a} = \frac{5b^3-ab^3}{4a}$$

$$10. \frac{(a-4b)(a+3b)8(2a+b)}{12(2a+b)(a+3b)} = \frac{2(a-4b)}{3} = \frac{2a-8b}{3}$$

$$11. \frac{-1(2b-9a)(9a+b)}{(9a+2b)(9a-2b)} = \frac{-1(9a+b)}{9a+2b} = \frac{-9a-b}{9a+2b}$$

$$12. \frac{(a^2+b^2)(a+b)(a-b)a^2}{a^2(a^2+b^2)(a+b)(a+b)} = \frac{a-b}{a+b}$$