

Enunciados

Simplifica lo máximo que sea posible las siguientes fracciones algebraicas:

①	$\frac{x^4-5x^3}{x^4+6x^3}$	②	$\frac{x^2+x}{x^2-x}$	③	$\frac{5x^2}{x^3+6x^2}$
④	$\frac{x^2-9}{x^2-6x+9}$	⑤	$\frac{x^2+2x+1}{x^2-1}$	⑥	$\frac{x+5}{x^2-25}$
⑦	$\frac{x^2-8x-48}{x^2-15x+36}$	⑧	$\frac{x^2+14x+48}{x^2+2x-48}$	⑨	$\frac{x^2+12x+20}{x^2+5x-20}$
⑩	$\frac{6x^2+25x+24}{9x^2+30x+16}$	⑪	$\frac{20x^2-11x-3}{24x^2-26x+6}$	⑫	$\frac{42x^2-13x-42}{42x^2-85x+42}$
⑬	$\frac{x^3-x^2+3x-3}{x^3-x^2+4x-4}$	⑭	$\frac{2x^3-2x^2+x-1}{2x^3-2x^2+3x-3}$	⑮	$\frac{5x^3+5x^2+4x+4}{6x^3+6x^2+5x+5}$
⑯	$\frac{x^2+6x+9}{x^3+3x^2+3x+9}$	⑰	$\frac{x^3-2x^2+2x-4}{x^2-4x+4}$	⑱	$\frac{x^2-4}{x^3+2x^2+x+2}$
⑲	$\frac{x^2-2x+1}{x^3-3x^2+3x-3}$	⑳	$\frac{x^3-x^2-x+1}{x^4-2x^3+2x^2-2x+1}$	㉑	$\frac{x^3+12x^2+35x}{x^3+14x^2+45x}$
㉒	$\frac{x}{x+3}$	㉓	$\frac{x+1}{x^2}$	㉔	$\frac{4x}{2x^2+4x}$
㉕	$\frac{x-3}{x^3-7x-6}$	㉖	$\frac{x^2+x}{x^3+x^2}$	㉗	$\frac{x-1}{x^2+4x+4}$
㉘	$\frac{x^2+x-20}{x^2+11x+30}$	㉙	$\frac{x^2-1}{x^3+7x^2-x-7}$	㉚	$\frac{2x^2+6x+4}{2x^2+10x+12}$
㉛	$\frac{x^3-3x^2+4}{x^4-3x^3+4x}$	㉜	$\frac{x+1}{(x-1)(x^2-1)}$	㉝	$\frac{(x+2)(x^2-4x+3)}{(x-1)(x^2+5x+6)}$
㉞	$\frac{x^3+x^2}{x^4-x^2}$	㉟	$\frac{3x^2+5x-2}{3x^2+7x+2}$	㊱	$\frac{2x+14}{x^4+7x^3+x+7}$
㊲	$\frac{2x-7}{2x^3-7x^2+8x-28}$	㊳	$\frac{x^2+4}{x+2}$	㊴	$\frac{(3x-9)(x+5)}{(x^2-25)(x-3)}$
㊵	$\frac{x^2-1}{x^4-1}$	㊶	$\frac{x^2-6x}{x^2-36}$	㊷	$\frac{(x+3)^2(x+2)^5}{(x+2)^4(x+3)^3}$
㊸	$\frac{x^2+2x+4}{x^3-8}$	㊹	$\frac{x^2+1}{x^4+2x^2+1}$	㊺	$\frac{x^3-3x^2+2x}{x^3-5x^2+8x-4}$
㊻	$\frac{(x+1)^3(x-1)^2}{(x^2-1)^3}$	㊼	$\frac{4x-20}{6x^2-30x}$	㊽	$\frac{x^2-4}{x^3-8}$

Soluciones

①	$\frac{x-5}{x+6}$	②	$\frac{x+1}{x-1}$	③	$\frac{5}{x+6}$
④	$\frac{x+3}{x-3}$	⑤	$\frac{x+1}{x-1}$	⑥	$\frac{1}{x-5}$
⑦	$\frac{x+4}{x-3}$	⑧	$\frac{x+6}{x-6}$	⑨	$\frac{x+2}{x-5}$
⑩	$\frac{2x+3}{3x+2}$	⑪	$\frac{5x+1}{6x-2}$	⑫	$\frac{7x+6}{7x-6}$
⑬	$\frac{x^2+3}{x^2+4}$	⑭	$\frac{2x^2+1}{2x^2+3}$	⑮	$\frac{5x^2+4}{6x^2+5}$
⑯	$\frac{x+3}{x^2+3}$	⑰	$\frac{x^2+2}{x-2}$	⑱	$\frac{x+2}{x^2+1}$
⑲	$\frac{1}{x-1}$	⑳	$\frac{x+1}{x^2+1}$	㉑	$\frac{x+7}{x+9}$
㉒	$\frac{x}{x+3}$	㉓	$\frac{x+1}{x^2}$	㉔	$\frac{2}{x^2+2}$
㉕	$\frac{1}{x^2+3x+2}$	㉖	$\frac{x+1}{x^2+1}$	㉗	$\frac{x-1}{x^2+4x+4}$
㉘	$\frac{x-4}{x+6}$	㉙	$\frac{1}{x+7}$	㉚	$\frac{x+1}{x+3}$
㉛	$\frac{1}{x}$	㉜	$\frac{1}{(x-1)^2}$	㉝	$\frac{x-3}{x+3}$
㉞	$\frac{1}{x-1}$	㉟	$\frac{3x-1}{3x+1}$	㊱	$\frac{2}{x^3+1}$
㊲	$\frac{1}{x^2+4}$	㊳	$\frac{x^2+4}{x+2}$	㊴	$\frac{3}{x-5}$
㊵	$\frac{1}{x^2+1}$	㊶	$\frac{x}{x+6}$	㊷	$\frac{x+2}{x+3}$
㊸	$\frac{1}{x-2}$	㊹	$\frac{1}{x^2+1}$	㊺	$\frac{x}{x-2}$
㊻	$\frac{1}{x-1}$	㊼	$\frac{2}{3x}$	㊽	$\frac{x+2}{x^2+2x+4}$