

EJERCICIOS DE FRACCIONES ALGEBRAICAS

Simplificar las siguientes fracciones

1. $\frac{10x^2+15x}{12x^2+18x}$

2. $\frac{12x^3-16x^2}{6x^3-8x^2}$

3. $\frac{9x^3-6x^2}{6x^2-4x}$

4. $\frac{2x^3+8x^2}{4x^2+16x}$

5. $\frac{x^2-16}{4x^2+16x}$

6. $\frac{9x^3-6x^2}{9x^2-4}$

7. $\frac{12x^3-16x^2}{9x^2-16}$

8. $\frac{4x^2-9}{12x^2+18x}$

9. $\frac{2x^2-3x-9}{12x^2+18x}$

10. $\frac{2x^3+8x^2}{x^2+9x+20}$

11. $\frac{x^2+12x+32}{x^2+9x+20}$

12. $\frac{x^2+12x+32}{x^2+5x-24}$

13. $\frac{x^2+x-12}{x^2+9x+20}$

14. $\frac{x^2+2x-15}{x^2+13x+40}$

15. $\frac{2x^2+13x+15}{2x^2+19x+24}$

16. $\frac{2x^2-3x-9}{2x^2+19x+24}$

17. $\frac{2x^2+19x+24}{x^2+16x+64}$

18. $\frac{2x^2+11x+12}{2x^2-3x-9}$

19. $\frac{2x^2+11x+12}{4x^2+12x+9}$

20. $\frac{x^2-6x+9}{2x^2-3x-9}$

21. $\frac{3x^2+8x-16}{2x^2+11x+12}$

22. $\frac{3x^2+11x-20}{2x^2+13x+15}$

23. $\frac{3x^2+20x+32}{2x^2+19x+24}$

24. $\frac{2x^2-3x-9}{3x^2-13x+12}$

25. $\frac{2x^3+3x^2-8x-12}{2x^2-5x-12}$

26. $\frac{2x^2+11x+12}{2x^3+3x^2-8x-12}$

27. $\frac{2x^3+3x^2-8x-12}{2x^3+3x^2-18x-27}$

28. $\frac{2x^3+3x^2-18x-27}{2x^2-3x-9}$

29. $\frac{3x^3-4x^2-12x+16}{2x^3+3x^2-8x-12}$

30. $\frac{6x^2+x-12}{2x^3+3x^2-18x-27}$

EJERCICIOS DE FRACCIONES ALGEBRAICAS

Multiplicar las siguientes fracciones

1. $\frac{10x^2+15x}{12x^3-16x^2} \cdot \frac{6x^3-8x^2}{12x^2+18x}$

11. $\frac{12x^3-16x^2}{6x^2-4x} \cdot \frac{9x^3-6x^2}{6x^3-8x^2}$

2. $\frac{6x^2-4x}{4x^2+16x} \cdot \frac{2x^3+8x^2}{9x^3-6x^2}$

12. $\frac{4x^2+16x}{3x^2-12x} \cdot \frac{x^2-16}{2x^3+8x^2}$

3. $\frac{x^2+7x+12}{x^2+6x+9} \cdot \frac{x^2-6x+9}{x^2-7x+12}$

13. $\frac{x^2-7x+12}{x^2-16} \cdot \frac{x^2-9}{x^2+7x+12}$

4. $\frac{x^2+8x+15}{x^2+2x-15} \cdot \frac{x^2+7x+12}{x^2+x-12}$

14. $\frac{x^2+6x-16}{x^2+17x+72} \cdot \frac{x^2+18x+81}{x^2+7x-18}$

5. $\frac{8x^3-27}{2x^2+7x-15} \cdot \frac{3x^2+15}{12x^3+18x^2+27x}$

15. $\frac{2x^2+18}{x^2+17x+72} \cdot \frac{x^2+18x+81}{x^2-81}$

6. $\frac{12x^3+18x^2+27x}{2x^2+7x-15} \cdot \frac{4x^2-12x+9}{8x^3-27}$

16. $\frac{8x^3+27}{20x^3-30x^2+45x} \cdot \frac{10x^2-15x}{4x^2-9}$

7. $\frac{2x^2+19x+24}{x^2+3x-40} \cdot \frac{x^2+6x-16}{2x^2-x-6}$

17. $\frac{x^2+16x+64}{2x^2+19x+24} \cdot \frac{2x^2-x-6}{x^2-4x+4}$

8. $\frac{3x^3+15x^2+2x+10}{6x^2+4} \cdot \frac{15x-10}{3x^2-13x-10}$

18. $\frac{3x^3+15x^2+2x+10}{9x^3-6x^2+6x-4} \cdot \frac{15x-10}{3x^2-13x-10}$

9. $\frac{x^2-2x}{x^2-5x+6} \cdot \frac{x^2+4x+4}{x^2-4}$

19. $\frac{x^2-6x+9}{x^2-9} \cdot \frac{x^2-5x+6}{3x^2-9x}$

10. $\frac{4x^2-20x}{2x^2-3x-35} \cdot \frac{2x^2-x-28}{x^2-16}$

20. $\frac{x^2-1}{x^2-2x-3} \cdot \frac{x^3+x^2-9x-9}{x^2-4x+3}$

EJERCICIOS DE FRACCIONES ALGEBRAICAS

Dividir las siguientes fracciones

1. $\frac{15x^2}{19y^3} \div \frac{20x}{38y^4}$

11. $\frac{2x^3+8x^2}{9x^3-6x^2} \div \frac{4x^2+16x}{6x^2-4x}$

2. $\frac{6x^3-8x^2}{12x^2+18x} \div \frac{12x^3-16x^2}{10x^2+15x}$

12. $\frac{15x^2-10x}{x^2+4x+4} \div \frac{9x^2-4}{3x^2+6x}$

3. $\frac{x^2-16}{2x^3+8x^2} \div \frac{3x^2-12x}{4x^2+16x}$

13. $\frac{x^2+18x+81}{x^2-81} \div \frac{x^2+17x+72}{2x^2+18}$

4. $\frac{x^2+18x+81}{x^2+7x-18} \div \frac{x^2+17x+72}{x^2+6x-16}$

14. $\frac{x^2+7x+12}{x^2+x-12} \div \frac{x^2+2x-15}{x^2+8x+15}$

5. $\frac{6x^2-4x}{12x^3-16x^2} \div \frac{9x^3-6x^2}{6x^3-8x^2}$

15. $\frac{x^2+6x+9}{x^2+7x+12} \div \frac{x^2-6x+9}{x^2-7x+12}$

6. $\frac{3x^2+15}{12x^3+18x^2+27x} \div \frac{2x^2+7x-15}{8x^3-27}$

16. $\frac{x^2-7x+12}{x^2-16} \div \frac{x^2+7x+12}{x^2-9}$

7. $\frac{2x^2+19x+24}{x^2+16x+64} \div \frac{2x^2-x-6}{x^2-4x+4}$

17. $\frac{x^2+6x-16}{2x^2-x-6} \div \frac{x^2+3x-40}{2x^2+19x+24}$

8. $\frac{10x^2-15x}{4x^2-9} \div \frac{20x^3-30x^2+45x}{8x^3+27}$

18. $\frac{12x^3+18x^2+27x}{2x^2+7x-15} \div \frac{8x^3-27}{4x^2-12x+9}$

9. $\frac{2x^2+19x+24}{x^2+3x-40} \div \frac{2x^2-x-6}{x^2+6x-16}$

19. $\frac{3x^3+15x^2+2x+10}{9x^3-6x^2+6x-4} \div \frac{3x^2-13x-10}{15x-10}$

10. $\frac{6x^2+4}{3x^3+15x^2+2x+10} \div \frac{15x-10}{3x^2-13x-10}$

20. $\frac{x^2-6x+9}{x^2-9} \div \frac{3x^2-9x}{x^2-5x+6}$

EJERCICIOS DE FRACCIONES ALGEBRAICAS

Sumar las siguientes fracciones

1. $\frac{2x}{15y^3} + \frac{x}{15y^3}$

12. $\frac{3x}{9x^3-6x^2} - \frac{2}{9x^3-6x^2}$

2. $\frac{4x}{12x^2+18x} + \frac{6}{12x^2+18x}$

13. $\frac{2x+3}{x^2+5x+4} + \frac{7}{x^2+5x+4}$

3. $\frac{x^2+8x}{2x^3+8x^2} + \frac{16}{2x^3+8x^2}$

14. $\frac{2x}{2x^3+8x^2} + \frac{16}{x+4}$

4. $\frac{2x}{x^2+7x-18} - \frac{4}{x^2+6x-16}$

15. $\frac{x^2}{x^2+9x+8} - \frac{x}{x^2+6x-16}$

5. $\frac{3}{x-2} + \frac{2}{x+5}$

16. $\frac{3}{x-2} + \frac{2}{x^2-4x+4}$

6. $\frac{4x}{x^3-27} + \frac{2}{x^2+3x+9}$

17. $\frac{x+2}{x^2+x-12} + \frac{x-2}{x^2-8x+15}$

7. $\frac{x^2+18x+81}{x^2+7x-18} + \frac{x^2+10x+16}{x^2+6x-16}$

18. $\frac{x^2+6x+9}{x^2+7x+12} - \frac{x^2-6x+9}{x^2-7x+12}$

8. $\frac{6x^2-4x}{12x^3-16x^2} + \frac{9x^3-6x^2}{3x^2-4x}$

19. $\frac{x^2}{x^2+6x+9} - \frac{4}{x^2-9}$

9. $\frac{3}{12x^3+18x^2+27x} + \frac{2}{8x^3-27}$

20. $\frac{2x}{2x^2-x-6} - \frac{x}{2x^2+19x+24}$

10. $\frac{x+2}{x^2+16x+64} - \frac{x-2}{x^2+8x}$

21. $\frac{2x+2}{9x^3-6x^2+6x-4} + \frac{x}{15x-10}$

11. $\frac{10x^2-15x}{4x^2-9} + \frac{4x^2-6x+9}{8x^3+27}$

22. $\frac{x^2-6x+9}{x^2-9} - \frac{3x^2-9x}{x^2-x-6}$