EJERCICIOS DE PRÁCTICA: OPERACIONES CON FRACCIONES

Tomados de Aguilar, A. (2015). Matemáticas simplificadas. (4a. ed.) Pearson Educación. Pp 53, 54, 57, 60. http://www.ebooks7-24.com.bdigital.sena.edu.co/?il=4829

Efectúar las siguientes sumas y restas de fracciones con igual denominador:

1.
$$\frac{1}{3} + \frac{5}{3}$$

10.
$$\frac{12}{5} - \frac{8}{5}$$

19.
$$1\frac{1}{2} + \frac{5}{2} - 3\frac{1}{2}$$

2.
$$\frac{3}{8} + \frac{1}{8}$$

11.
$$\frac{4}{9} - \frac{1}{9}$$

20.
$$2\frac{7}{9} - \frac{4}{9} - \frac{7}{9}$$

3.
$$\frac{4}{9} + \frac{5}{9} + \frac{2}{9}$$

12.
$$\frac{11}{15} - \frac{7}{15}$$

21.
$$1\frac{3}{4} - 1\frac{1}{4} - \frac{1}{4}$$

4.
$$\frac{7}{6} + \frac{5}{6} + \frac{1}{6}$$
 13. $3\frac{1}{3} - \frac{8}{3}$

13.
$$3\frac{1}{3} - \frac{8}{3}$$

22.
$$1\frac{3}{5} + 7\frac{4}{5} - 9\frac{2}{5}$$

5.
$$\frac{3}{7} + \frac{2}{7} + \frac{6}{7}$$

14.
$$1\frac{2}{17} - \frac{14}{17}$$

23.
$$3\frac{2}{7} + 1\frac{3}{7} - 4\frac{3}{7}$$

6.
$$\frac{3}{10} + \frac{7}{10} + \frac{1}{10} + \frac{5}{10}$$

15.
$$\frac{4}{6} + \frac{7}{6} - \frac{8}{6}$$

24.
$$2\frac{3}{5} + 1\frac{1}{5} - 2\frac{4}{5} - \frac{2}{5}$$

7.
$$1\frac{5}{9} + 3\frac{1}{9} + \frac{7}{9}$$

16.
$$\frac{3}{12} - \frac{5}{12} + \frac{10}{12}$$

16.
$$\frac{3}{12} - \frac{5}{12} + \frac{10}{12}$$
 25. $2\frac{1}{8} - \frac{7}{8} - 1\frac{1}{8} + \frac{3}{8}$

8.
$$\frac{13}{16} + 2\frac{9}{16} + 4\frac{1}{16} + 1\frac{3}{16}$$
 17. $\frac{3}{20} + \frac{18}{20} - \frac{13}{20} - \frac{4}{20}$ 26. $\frac{14}{13} - 1\frac{7}{13} - \frac{2}{13} + 1\frac{9}{13}$

17.
$$\frac{3}{20} + \frac{18}{20} - \frac{13}{20} - \frac{4}{20}$$

26.
$$\frac{14}{13} - 1\frac{7}{13} - \frac{2}{13} + 1\frac{9}{13}$$

9.
$$1\frac{5}{8} + \frac{13}{8} + 2\frac{7}{8} + \frac{6}{8} + \frac{9}{8}$$
 18. $\frac{7}{9} - \frac{11}{9} + \frac{15}{9} - \frac{6}{9} - \frac{1}{9}$ 27. $3\frac{2}{5} + 1\frac{1}{5} + \frac{6}{5} - 4\frac{4}{5}$

18.
$$\frac{7}{9} - \frac{11}{9} + \frac{15}{9} - \frac{6}{9} - \frac{1}{9}$$

27.
$$3\frac{2}{5} + 1\frac{1}{5} + \frac{6}{5} - 4\frac{4}{5}$$

Efectúa las siguientes sumas y restas con diferente denominador:

1.
$$\frac{1}{2} + \frac{1}{3}$$

8.
$$\frac{5}{3} + \frac{4}{9} + \frac{6}{18}$$

15.
$$\frac{3}{4} + \frac{1}{6} - \frac{11}{12}$$

2.
$$\frac{2}{3} + \frac{5}{6}$$

2.
$$\frac{2}{3} + \frac{5}{6}$$
 9. $\frac{5}{4} + \frac{7}{8} + \frac{1}{16}$

16.
$$\frac{7}{12} + \frac{3}{8} - \frac{1}{20}$$

3.
$$\frac{5}{10} + \frac{3}{2}$$

3.
$$\frac{5}{10} + \frac{3}{2}$$
 10. $\frac{5}{8} - \frac{1}{4}$

17.
$$\frac{3}{4} + \frac{2}{5} - \frac{3}{20}$$

4.
$$\frac{7}{24} + \frac{11}{30}$$

4.
$$\frac{7}{24} + \frac{11}{30}$$
 11. $\frac{5}{12} - \frac{7}{24}$

18.
$$3+\frac{1}{2}-\frac{3}{4}$$

5.
$$\frac{8}{26} + \frac{15}{39}$$

12.
$$\frac{11}{64} - \frac{5}{8}$$

19.
$$\frac{1}{4} - \frac{1}{16} - \frac{1}{2}$$

6.
$$\frac{1}{2} + \frac{1}{4} + \frac{1}{8}$$

13.
$$\frac{7}{5} + \frac{8}{35} - \frac{9}{21}$$

20.
$$\frac{4}{5} - \frac{1}{6} - \frac{1}{3}$$

7.
$$\frac{5}{6} + \frac{1}{3} + \frac{1}{2}$$

14.
$$\frac{3}{4} + \frac{5}{6} - \frac{1}{10}$$

21.
$$\frac{5}{8} + \frac{3}{4} - \frac{1}{6} - \frac{2}{3}$$

Efectúa los siguientes productos de fracciones:

1.
$$\frac{2}{5} \times \frac{10}{8}$$

8.
$$\frac{6}{3} \times 2\frac{1}{2}$$

15.
$$1\frac{1}{6} \times \frac{12}{7} \times \frac{14}{2}$$

2.
$$\frac{5}{4} \times \frac{2}{7}$$

2.
$$\frac{5}{4} \times \frac{2}{7}$$
 9. $1\frac{3}{5} \times 4\frac{5}{8}$

16.
$$\frac{7}{9} \times \frac{8}{5} \times \frac{3}{14} \times 15$$

3.
$$\frac{3}{6} \times \frac{2}{9}$$

3.
$$\frac{3}{6} \times \frac{2}{9}$$
 10. $2\frac{2}{3} \times 3\frac{1}{5}$

17.
$$2\frac{2}{5} \times \frac{5}{9} \times \frac{1}{3} \times 1 \times \frac{3}{5}$$

4.
$$\frac{3}{4} \times \frac{6}{3}$$

11.
$$\frac{2}{3} \times \frac{3}{4} \times \frac{5}{6}$$

4.
$$\frac{3}{4} \times \frac{6}{3}$$
 11. $\frac{2}{3} \times \frac{3}{4} \times \frac{5}{6}$ 18. $\frac{2}{9} \times \frac{7}{5} \times \frac{3}{14} \times 5$

5.
$$\frac{3}{4} \times 2\frac{3}{5}$$

12.
$$\frac{1}{5} \times \frac{9}{4} \times \frac{12}{6}$$

5.
$$\frac{3}{4} \times 2\frac{3}{5}$$
 12. $\frac{1}{5} \times \frac{9}{4} \times \frac{12}{6}$ 19. $2\frac{4}{9} \times 2\frac{1}{4} \times 1\frac{3}{11} \times 1\frac{1}{3}$

6.
$$3\frac{2}{5} \times \frac{2}{4}$$

13.
$$\frac{2}{3} \times \frac{5}{7} \times \frac{3}{4}$$

6.
$$3\frac{2}{5} \times \frac{2}{4}$$
 20. $2 \times 7\frac{3}{5} \times 1\frac{6}{19} \times \frac{3}{4}$ 20. $2 \times 7\frac{3}{5} \times 1\frac{6}{19} \times \frac{3}{4}$

7.
$$1\frac{2}{5} \times 2\frac{5}{7}$$

14.
$$\frac{3}{4} \times \frac{5}{3} \times \frac{4}{5}$$

7.
$$1\frac{2}{5} \times 2\frac{5}{7}$$
 14. $\frac{3}{4} \times \frac{5}{3} \times \frac{4}{5}$ 21. $1\frac{1}{2} \times \frac{4}{6} \times 2\frac{2}{5} \times 2\frac{1}{2}$

Efectúa las siguientes divisiones de fracciones:

1.
$$\frac{1}{6} \div \frac{2}{3}$$

5.
$$\frac{5}{12} \div \frac{5}{6}$$

9.
$$\frac{4}{6} \div 1\frac{2}{3}$$

13.
$$\frac{4}{9} \div 8$$

1.
$$\frac{1}{6} \div \frac{2}{3}$$
 5. $\frac{5}{12} \div \frac{5}{6}$ 9. $\frac{4}{6} \div 1\frac{2}{3}$ 13. $\frac{4}{9} \div 8$ 17. $\frac{11}{9} \div 3\frac{2}{3}$

2.
$$\frac{3}{4} \div \frac{1}{2}$$

6.
$$\frac{7}{8} \div \frac{21}{16}$$

10.
$$2\frac{2}{3} \div \frac{4}{15}$$

14.
$$3\frac{1}{4} \div 20$$

18.
$$5\frac{1}{4} \div 1\frac{1}{6}$$

3.
$$\frac{6}{8} \div \frac{1}{4}$$

7.
$$\frac{4}{3} \div \frac{5}{30}$$

11.
$$1\frac{4}{5} \div \frac{13}{10}$$

15.
$$1 \div 1\frac{1}{4}$$

2.
$$\frac{3}{4} \div \frac{1}{2}$$
 6. $\frac{7}{8} \div \frac{21}{16}$ 10. $2\frac{2}{3} \div \frac{4}{15}$ 14. $3\frac{1}{4} \div 26$ 18. $5\frac{1}{4} \div 1\frac{1}{6}$ 3. $\frac{6}{8} \div \frac{1}{4}$ 7. $\frac{4}{3} \div \frac{5}{30}$ 11. $1\frac{4}{5} \div \frac{13}{10}$ 15. $1 \div 1\frac{1}{4}$ 19. $5\frac{5}{8} \div 3\frac{3}{4}$ 4. $\frac{13}{9} \div \frac{4}{3}$ 8. $\frac{28}{7} \div \frac{4}{5}$ 12. $\frac{1}{2} \div 3\frac{1}{4}$ 16. $34 \div 2\frac{5}{6}$ 20. $1\frac{11}{13} \div 8$

4.
$$\frac{13}{9} \div \frac{4}{3}$$

8.
$$\frac{28}{7} \div \frac{4}{5}$$

12.
$$\frac{1}{2} \div 3\frac{1}{4}$$

16.
$$34 \div 2\frac{5}{6}$$

20.
$$1\frac{11}{12} \div 8$$