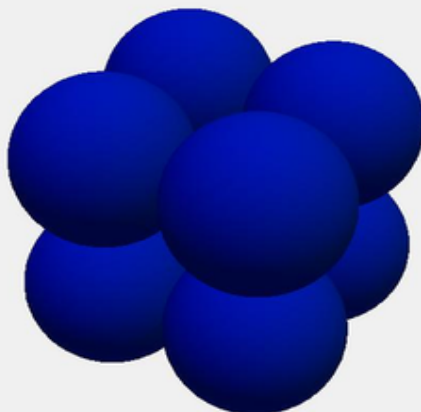


MathCon

The Mathematics Firm

Reducciones

Problemas sobre reducciones 2



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Capítulo 1

Sumas 2

1.1. Reducir las siguientes sumas

- | | |
|----------------------------------|------------------------|
| 1. $\frac{3}{6} + \frac{5}{9}$ | Sol: $\frac{19}{18}$. |
| 2. $\frac{6}{3} + \frac{9}{10}$ | Sol: $\frac{29}{10}$. |
| 3. $\frac{4}{9} + \frac{10}{4}$ | Sol: $\frac{53}{18}$. |
| 4. $\frac{8}{2} + \frac{2}{5}$ | Sol: $\frac{22}{5}$. |
| 5. $\frac{10}{5} + \frac{10}{9}$ | Sol: $\frac{28}{9}$. |
| 6. $\frac{2}{7} + \frac{1}{2}$ | Sol: $\frac{11}{14}$. |
| 7. $\frac{3}{5} + \frac{5}{2}$ | Sol: $\frac{31}{10}$. |
| 8. $\frac{5}{10} + \frac{3}{4}$ | Sol: $\frac{5}{4}$. |
| 9. $\frac{7}{5} + \frac{1}{10}$ | Sol: $\frac{3}{2}$. |
| 10. $\frac{4}{9} + \frac{7}{5}$ | Sol: $\frac{83}{45}$. |
| 11. $\frac{8}{7} + \frac{1}{3}$ | Sol: $\frac{31}{21}$. |
| 12. $\frac{3}{7} + \frac{9}{4}$ | Sol: $\frac{75}{28}$. |
| 13. $\frac{6}{4} + \frac{7}{6}$ | Sol: $\frac{8}{3}$. |
| 14. $\frac{5}{2} + \frac{3}{8}$ | Sol: $\frac{23}{8}$. |
| 15. $\frac{7}{9} + \frac{8}{2}$ | Sol: $\frac{43}{9}$. |

16. $\frac{6}{8} + \frac{10}{2}$

Sol: $\frac{23}{4}$.

17. $\frac{8}{5} + \frac{2}{8}$

Sol: $\frac{37}{20}$.

18. $\frac{9}{8} + \frac{3}{10}$

Sol: $\frac{57}{40}$.

19. $\frac{7}{6} + \frac{2}{4}$

Sol: $\frac{5}{3}$.

20. $\frac{6}{7} + \frac{4}{6}$

Sol: $\frac{32}{21}$.

1.2. Reducir las siguientes sumas

21. $\frac{2}{6} - \frac{10}{7}$

Sol: $-\frac{23}{21}$.

22. $\frac{5}{6} - \frac{1}{8}$

Sol: $\frac{17}{24}$.

23. $\frac{7}{4} - \frac{9}{7}$

Sol: $\frac{13}{28}$.

24. $\frac{7}{5} - \frac{1}{6}$

Sol: $\frac{37}{30}$.

25. $\frac{4}{5} - \frac{3}{7}$

Sol: $\frac{13}{35}$.

26. $\frac{5}{8} - \frac{10}{3}$

Sol: $-\frac{65}{24}$.

27. $\frac{2}{10} - \frac{6}{5}$

Sol: -1 .

28. $\frac{1}{4} - \frac{1}{10}$

Sol: $\frac{3}{20}$.

29. $\frac{5}{7} - \frac{3}{8}$

Sol: $\frac{19}{56}$.

30. $\frac{7}{5} - \frac{1}{4}$

Sol: $\frac{23}{20}$.

31. $\frac{4}{3} - \frac{3}{10}$

Sol: $\frac{31}{30}$.

32. $\frac{2}{10} - \frac{1}{9}$

Sol: $\frac{4}{45}$.

33. $\frac{8}{2} - \frac{3}{7}$

Sol: $\frac{25}{7}$.

34. $\frac{4}{3} - \frac{1}{10}$

Sol: $\frac{37}{30}$.

35. $\frac{5}{2} - \frac{6}{7}$

Sol: $\frac{23}{14}$.

36. $\frac{1}{6} - \frac{8}{10}$

Sol: $-\frac{19}{30}$.

37. $\frac{1}{9} - \frac{8}{10}$

Sol: $-\frac{31}{45}$.

38. $\frac{5}{4} - \frac{6}{5}$

Sol: $\frac{1}{20}$.

39. $\frac{9}{7} - \frac{3}{5}$

Sol: $\frac{24}{35}$.

40. $\frac{10}{9} - \frac{10}{7}$

Sol: $-\frac{20}{63}$.

1.3. Reducir las siguientes sumas

41. $\frac{1}{4} + \frac{1}{3} + \frac{3}{5}$

Sol: $\frac{71}{60}$.

42. $\frac{2}{4} + \frac{2}{5} + \frac{1}{2}$

Sol: $\frac{7}{5}$.

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

Sol: $\frac{51}{10}$.

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

Sol: $\frac{53}{15}$.

45. $3 + \frac{3}{4} + \frac{4}{5}$

Sol: $\frac{91}{20}$.

46. $\frac{1}{5} + \frac{1}{2} + \frac{5}{3}$

Sol: $\frac{71}{30}$.

47. $\frac{3}{2} + \frac{1}{5} + \frac{1}{3}$

Sol: $\frac{61}{30}$.

48. $\frac{5}{4} + \frac{3}{5} + \frac{4}{3}$

Sol: $\frac{191}{60}$.

49. $\frac{4}{3} + \frac{1}{2} + \frac{1}{2}$

Sol: $\frac{7}{3}$.

50. $\frac{2}{4} + \frac{1}{4} + \frac{2}{3}$

Sol: $\frac{17}{12}$.

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

Sol: $\frac{179}{60}$.

52. $\frac{5}{3} + \frac{3}{4} + \frac{3}{5}$

Sol: $\frac{181}{60}$.

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

Sol: $\frac{11}{5}$.

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

Sol: $\frac{73}{30}$.

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

Sol: $\frac{25}{12}$.

56. $\frac{3}{5} + \frac{3}{2} + \frac{1}{3}$

Sol: $\frac{73}{30}$.

57. $2 + \frac{1}{4} + \frac{1}{5}$

Sol: $\frac{49}{20}$.

58. $\frac{1}{4} + \frac{2}{3} + \frac{4}{2}$

Sol: $\frac{35}{12}$.

59. $\frac{1}{4} + \frac{2}{3} + \frac{4}{2}$

Sol: $\frac{35}{12}$.

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

Sol: $\frac{7}{2}$.

1.4. Reducir las siguientes sumas

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

Sol: $-\frac{17}{12}$.

62. $\frac{1}{5} - \frac{2}{3} - \frac{3}{5}$

Sol: $-\frac{16}{15}$.

63. $\frac{1}{5} - \frac{3}{5} - \frac{2}{5}$

Sol: $-\frac{4}{5}$.

64. $\frac{5}{4} - \frac{1}{3} - \frac{1}{3}$

Sol: $\frac{7}{12}$.

65. $\frac{1}{2} - \frac{5}{2} - \frac{3}{5}$

Sol: $-\frac{13}{5}$.

66. $\frac{3}{5} - \frac{5}{2} - \frac{1}{5}$

Sol: $-\frac{21}{10}$.

67. $\frac{4}{5} - \frac{5}{3} - \frac{1}{5}$

Sol: $-\frac{16}{15}$.

68. $\frac{2}{5} - \frac{1}{4} - \frac{4}{2}$

Sol: $-\frac{37}{20}$.

69. $\frac{5}{4} - \frac{3}{2} - \frac{5}{2}$

Sol: $-\frac{11}{4}$.

70. $\frac{3}{2} - \frac{3}{4} - \frac{4}{2}$

Sol: $-\frac{5}{4}$.

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

Sol: $-\frac{5}{6}$.

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

Sol: $\frac{5}{6}$.

73. $\frac{5}{4} - \frac{3}{4} - \frac{2}{5}$

Sol: $\frac{1}{10}$.

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

Sol: $\frac{1}{3}$.

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

Sol: $\frac{1}{20}$.

76. $\frac{2}{4} - \frac{2}{5} - \frac{5}{3}$

Sol: $-\frac{47}{30}$.

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

Sol: $-\frac{9}{4}$.

78. $\frac{4}{2} - \frac{3}{4} - \frac{2}{3}$

Sol: $\frac{7}{12}$.

$$79. \frac{2}{5} - \frac{3}{2} - \frac{1}{2} \qquad \text{Sol: } -\frac{8}{5}.$$

$$80. \frac{4}{5} - \frac{1}{2} - \frac{2}{4} \qquad \text{Sol: } -\frac{1}{5}.$$

1.5. Reducir las siguientes sumas

- | | |
|--|---------------------------|
| 81. $\frac{a}{b} + \frac{a}{3b}$ | Sol: $\frac{4a}{3b}$. |
| 82. $\frac{a}{3b} + \frac{3a}{b}$ | Sol: $\frac{10a}{3b}$. |
| 83. $\frac{a}{2b} + \frac{a}{b}$ | Sol: $\frac{3a}{2b}$. |
| 84. $\frac{2a}{b} + \frac{2a}{2b}$ | Sol: $\frac{3a}{b}$. |
| 85. $\frac{a}{b} + \frac{2a}{3b}$ | Sol: $\frac{5a}{3b}$. |
| 86. $\frac{3a}{2b} + \frac{2a}{3b}$ | Sol: $\frac{13a}{6b}$. |
| 87. $\frac{a}{2b} + \frac{a}{3b}$ | Sol: $\frac{5a}{6b}$. |
| 88. $\frac{a}{3b} + \frac{2a}{3b}$ | Sol: $\frac{a}{b}$. |
| 89. $\frac{2a}{b} + \frac{a}{2b}$ | Sol: $\frac{5a}{2b}$. |
| 90. $\frac{3a}{4b} + \frac{a}{3b}$ | Sol: $\frac{13a}{12b}$. |
| 91. $\frac{3a}{4b} + \frac{2a}{5b}$ | Sol: $\frac{23a}{20b}$. |
| 92. $\frac{5a}{2b} + \frac{5a}{4b}$ | Sol: $\frac{15a}{4b}$. |
| 93. $\frac{3a}{5b} - \frac{a}{2b}$ | Sol: $\frac{a}{10b}$. |
| 94. $\frac{3a}{4b} - \frac{2a}{b}$ | Sol: $-\frac{5a}{4b}$. |
| 95. $\frac{4a}{3b} - \frac{4a}{5b}$ | Sol: $\frac{8a}{15b}$. |
| 96. $\frac{a}{3b} - \frac{a}{b}$ | Sol: $-\frac{2a}{3b}$. |
| 97. $\frac{2a}{3b} - \frac{3a}{4b}$ | Sol: $-\frac{a}{12b}$. |
| 98. $\frac{a}{5b} - \frac{5a}{2b}$ | Sol: $-\frac{23a}{10b}$. |
| 99. $\frac{5a}{4b} - \frac{5a}{3b}$ | Sol: $-\frac{5a}{12b}$. |
| 100. $\frac{11a}{5b} - \frac{15a}{2b}$ | Sol: $-\frac{53a}{10b}$. |