Esercizi sulle proprietà delle potenze con le frazioni

Prodotto di potenze con lo stesse esponente (quarta proprietà)

1. $\left(\frac{1}{2}\right)^2 \cdot \left(\frac{1}{3}\right)^2 =$

2. $\left(\frac{2}{3}\right)^2 \cdot \left(\frac{1}{5}\right)^2 =$

3. $\left(\frac{1}{4}\right)^3 \cdot \left(\frac{1}{3}\right)^3 =$

4. $\left(\frac{2}{5}\right)^3 \cdot \left(\frac{1}{3}\right)^3 =$

5. $\left(\frac{3}{4}\right)^1 \cdot \left(\frac{1}{2}\right)^1 =$

6. $\left(\frac{4}{3}\right)^3 \cdot \left(\frac{5}{3}\right)^3 =$

7. $\left(\frac{8}{3}\right)^4 \cdot \left(\frac{3}{4}\right)^4 =$

8. $\left(\frac{7}{5}\right)^2 \cdot \left(\frac{5}{14}\right)^2 =$

9. $\left(\frac{5}{4}\right)^2 \cdot \left(\frac{4}{7}\right)^2 =$

10. $\left(\frac{10}{3}\right)^2 \cdot \left(\frac{1}{15}\right)^2 =$

11. $\left(\frac{11}{3}\right)^3 \cdot \left(\frac{9}{11}\right)^3 =$

12. $\left(\frac{12}{7}\right)^4 \cdot \left(\frac{7}{24}\right)^4 =$

13. $\left(\frac{15}{31}\right)^5 \cdot \left(\frac{31}{5}\right)^5 =$

14. $\left(\frac{7}{23}\right)^2 \cdot \left(\frac{46}{28}\right)^2 =$

15. $\left(\frac{1}{51}\right)^6 \cdot \left(\frac{17}{3}\right)^6 =$

16. $\left(\frac{28}{9}\right)^7 \cdot \left(\frac{27}{14}\right)^7 =$

17. $\left(\frac{50}{100}\right)^9 \cdot \left(\frac{10}{20}\right)^9 =$

18. $\left(\frac{18}{42}\right)^7 \cdot \left(\frac{14}{9}\right)^7 =$

19. $\left(\frac{22}{47}\right)^0 \cdot \left(\frac{47}{44}\right)^0 =$

20. $\left(\frac{19}{17}\right)^2 \cdot \left(\frac{34}{57}\right)^5 =$

21. $\left(\frac{10}{44}\right)^3 \cdot \left(\frac{66}{40}\right)^3 =$

22. $\left(\frac{105}{3}\right)^1 \cdot \left(\frac{9}{33}\right)^1 =$

23. $\left(\frac{25}{40}\right)^3 \cdot \left(\frac{20}{50}\right)^3 =$

24. $\left(\frac{8}{69}\right)^3 \cdot \left(\frac{23}{24}\right)^3 =$

25. $\left(\frac{81}{9}\right)^6 \cdot \left(\frac{2}{18}\right)^6 =$

26. $\left(\frac{25}{44}\right)^0 \cdot \left(\frac{22}{50}\right)^0 =$

27. $\left(\frac{71}{42}\right)^2 \cdot \left(\frac{21}{142}\right)^2 =$

28. $\left(\frac{90}{39}\right)^{12} \cdot \left(\frac{13}{30}\right)^{12} =$

29. $\left(\frac{70}{49}\right)^{21} \cdot \left(\frac{7}{10}\right)^{21} =$

30. $\left(\frac{95}{50}\right)^{18} \cdot \left(\frac{10}{19}\right)^{18} =$

31. $\left(\frac{1}{3}\right)^2 \cdot \left(\frac{2}{3}\right)^2 \cdot \left(\frac{3}{4}\right)^2 =$

32. $\left(\frac{3}{5}\right)^3 \cdot \left(\frac{10}{7}\right)^3 \cdot \left(\frac{14}{2}\right)^3 =$

33. $\left(\frac{2}{5}\right)^0 \cdot \left(\frac{7}{3}\right)^0 \cdot \left(\frac{8}{9}\right)^0 =$

34. $\left(\frac{5}{9}\right)^4 \cdot \left(\frac{20}{15}\right)^4 \cdot \left(\frac{27}{10}\right)^4 =$

35. $\left(\frac{15}{29}\right)^8 \cdot \left(\frac{58}{15}\right)^8 \cdot \left(\frac{1}{2}\right)^8 =$

36. $\left(\frac{1}{2}\right)^4 \cdot \left(\frac{2}{3}\right)^4 \cdot \left(\frac{3}{4}\right)^4 =$

37. $\left(\frac{25}{30}\right)^5 \cdot \left(\frac{36}{35}\right)^5 \cdot \left(\frac{14}{18}\right)^5 =$

38. $\left(\frac{55}{49}\right)^7 \cdot \left(\frac{14}{11}\right)^7 \cdot \left(\frac{7}{5}\right)^7 =$

39. $\left(\frac{100}{45}\right)^3 \cdot \left(\frac{9}{20}\right)^3 \cdot \left(\frac{1}{3}\right)^3 =$

40. $\left(\frac{29}{54}\right)^4 \cdot \left(\frac{4}{3}\right)^4 \cdot \left(\frac{27}{58}\right)^4 =$

41. $\left(\frac{78}{39}\right)^{15} \cdot \left(\frac{121}{11}\right)^{15} \cdot \left(\frac{1}{22}\right)^{15} =$

42. $\left(\frac{85}{90}\right)^1 \cdot \left(\frac{80}{75}\right)^1 \cdot \left(\frac{13}{12}\right)^1 =$

43. $\left(\frac{81}{28}\right)^2 \cdot \left(\frac{14}{77}\right)^2 \cdot \left(\frac{66}{27}\right)^2 =$

44. $\left(\frac{48}{23}\right)^{12} \cdot \left(\frac{69}{16}\right)^{12} \cdot \left(\frac{2}{18}\right)^{12} =$

45. $\left(\frac{125}{41}\right)^{15} \cdot \left(\frac{4}{15}\right)^{15} \cdot \left(\frac{123}{100}\right)^{15} =$

46. $\left(\frac{84}{300}\right)^3 \cdot \left(\frac{420}{21}\right)^3 \cdot \left(\frac{25}{14}\right)^3 =$

47. $\left(\frac{5}{3}\right)^{14} \cdot \left(\frac{6}{5}\right)^{14} \cdot \left(\frac{4}{7}\right)^{14} \cdot \left(\frac{14}{16}\right)^{14} =$

48. $\left(\frac{9}{13}\right)^5 \cdot \left(\frac{6}{18}\right)^5 \cdot \left(\frac{26}{3}\right)^5 \cdot \left(\frac{3}{2}\right)^5 =$

49. $\left(\frac{14}{15}\right)^1 \cdot \left(\frac{6}{5}\right)^1 \cdot \left(\frac{15}{42}\right)^1 \cdot \left(\frac{45}{18}\right)^1 =$

50. $\left(\frac{3}{4}\right)^0 \cdot \left(\frac{8}{9}\right)^0 \cdot \left(\frac{5}{12}\right)^0 \cdot \left(\frac{0}{7}\right)^0 =$