

1. Bez

Bruchrechnen

Lösungen AB 1

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

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

3. $\frac{9}{14}$

4. $\frac{3}{25}$

5. $\frac{1}{4}$

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

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

8. $\frac{3}{5}$

9. $\frac{8}{3} = 2\frac{2}{3}$

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

11. 8

12. $\frac{3}{20}$

13. $\frac{1}{10}$

14. $\frac{4}{45}$

15. $\frac{32}{9} = 3\frac{5}{9}$

16. $\frac{3}{2} = 1\frac{1}{2}$

17. $\frac{32}{3} = 10\frac{2}{3}$

18. $\frac{35}{32} = 1\frac{3}{32}$

19. $\frac{25}{77}$

20. $\frac{32}{175}$

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

22. $\frac{4}{9}$

23. $\frac{45}{32} = 1\frac{13}{32}$

24. $\frac{7}{72}$

25. $\frac{1}{12}$

26. $\frac{3}{10}$

27. $\frac{27}{8} = 3\frac{3}{8}$

28. 1

29. $\frac{4}{9}$

30. $\frac{1}{8}$

31. $\frac{13}{192}$

32. $\frac{3}{20}$

33. $\frac{5}{17}$

34. $\frac{3}{14}$

35. $\frac{1}{5}$

36. $\frac{1}{10}$

37. $\frac{1}{30}$

38. $\frac{15}{44}$

39. $\frac{5}{7}$

40. $\frac{3}{5}$

41. $\frac{4}{3} = 1\frac{1}{3}$

42. $\frac{ac}{bd}$

43. $\frac{ac^2}{bd}$

44. $\frac{x^3y}{z^2}$

45. $\frac{c^2}{6b} =$

46. $\frac{e^2f}{12}$

47. $\frac{5l^2}{2}$

48. $\frac{3p^2}{8q}$

49. $\frac{27}{10} = 2\frac{7}{10}$

50. $\frac{15}{11} = 1\frac{4}{11}$

51. $\frac{33}{20} = 1\frac{13}{20}$

52. $\frac{105}{4} = 26\frac{1}{4}$

53. $\frac{35}{3} = 11\frac{2}{3}$

54. 1

55. $\frac{13}{6} = 2\frac{1}{6}$

56. $\frac{10}{9} = 1\frac{1}{9}$

57. $\frac{9}{5} = 1\frac{4}{5}$

58. $\frac{25}{8} = 3\frac{1}{8}$

59. $\frac{9}{4} = 2\frac{1}{4}$

60. 3

61. $\frac{25}{4} = 6\frac{1}{4}$

62. $\frac{121}{9} = 13\frac{4}{9}$

63. $\frac{3}{2} = 1\frac{1}{2}$

64. $\frac{2}{5}$

65. $\frac{8}{3} = 2\frac{2}{3}$

66. $\frac{9}{8} = 1\frac{1}{8}$

67. $\frac{15}{16}$

68. $\frac{28}{45}$

69. $\frac{6}{5} = 1\frac{1}{5}$

70. $\frac{44}{27} = 1\frac{17}{27}$

71. $\frac{5}{6}$

72. $\frac{1}{4}$

73. $\frac{121}{144}$

74. 6

75. $\frac{3}{10}$

76. $\frac{15}{7} = 2\frac{1}{7}$

77. $\frac{5}{4} = 1\frac{1}{4}$

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

79. $\frac{3}{4}$

80. $\frac{15}{4} = 3\frac{3}{4}$

81. $\frac{1}{2}$

82. 4

83. 205

84. $\frac{21}{320}$

85. $\frac{10}{21}$

86. $\frac{1}{3}$

87. $\frac{14}{13} = 1\frac{1}{13}$

88. 2

89. $\frac{1}{2}$

90. $\frac{11}{3} = 3\frac{2}{3}$

91. $\frac{ad}{bc}$

92. $\frac{abe}{cd}$

93. $\frac{a^2bf}{cde^2}$

94. $\frac{abef}{c^2d^2}$

95. $\frac{3a^2c}{2b^3}$

96. $\frac{5e}{6}$

97. $\frac{7p}{6q}$

98. $\frac{2xz}{3y}$

99. 2

100. $\frac{8}{15}$

101. $\frac{3}{4}$

102. $\frac{4}{3} = 1\frac{1}{3}$

103. $\frac{1}{16}$

104. $\frac{1}{12}$

105. $\frac{15}{2} = 7\frac{1}{2}$

106. $\frac{5}{6}$

107. $\frac{6}{5} = 1\frac{1}{5}$

108. $\frac{4}{5}$

109. $\frac{9}{4} = 2\frac{1}{4}$

110. $\frac{1}{21}$

111. $\frac{36}{25} = 1\frac{11}{25}$

112. 2

113. $\frac{11}{25}$

114. $\frac{2}{5}$

115. $\frac{10}{13}$

116. $\frac{4}{3} = 1\frac{1}{3}$

117. $\frac{2}{3}$

118. $\frac{ac}{b}$

119. $\frac{5pr}{3qs}$

120. $\frac{9x}{10yz}$

Lernkontrolle (ausführliche Lösungen)

121. $\left(\frac{3}{4} + 1\frac{1}{2}\right) : \frac{3}{2} = \left(\frac{3}{4} + \frac{3}{2}\right) \cdot \frac{2}{3} = \left(\frac{3}{4} + \frac{6}{4}\right) \cdot \frac{2}{3} = \frac{9 \cdot 2}{4 \cdot 3} = \frac{3}{2} = 1\frac{1}{2}$

122. $\left(1\frac{1}{2} - \frac{3}{4}\right) : \frac{4}{3} = \left(\frac{3}{2} - \frac{3}{4}\right) \cdot \frac{3}{4} = \left(\frac{6}{4} - \frac{3}{4}\right) \cdot \frac{3}{4} = \frac{3 \cdot 3}{4 \cdot 4} = \frac{9}{16}$

123. $\frac{2}{3} \cdot \frac{4}{5} + \frac{1}{2} \cdot \frac{5}{3} = \frac{8}{15} + \frac{5}{6} = \frac{16}{30} + \frac{25}{30} = \frac{41}{30} = 1\frac{11}{30}$

124. $\left(\frac{3}{8} : \frac{2}{3}\right) : \frac{4}{5} = \frac{3 \cdot 3 \cdot 5}{8 \cdot 2 \cdot 4} = \frac{45}{64}$

125. $\left(1\frac{1}{2} \cdot \frac{7}{6}\right) : \frac{1}{4} = \frac{3 \cdot 7 \cdot 4}{2 \cdot 6 \cdot 1} = 7$

126. $\left(\frac{4}{3} : \frac{2}{3}\right) \cdot \frac{5}{6} = \frac{4 \cdot 3 \cdot 5}{3 \cdot 2 \cdot 6} = \frac{5}{3} = 1\frac{2}{3}$

127. $\left(\frac{4}{5} - \frac{2}{3}\right) \cdot \left(\frac{1}{2} + \frac{1}{3}\right) = \left(\frac{12}{15} - \frac{10}{15}\right) \cdot \left(\frac{3}{6} + \frac{2}{6}\right) = \frac{2 \cdot 5}{15 \cdot 6} = \frac{1}{9}$