

חלוקת שברים - פתרונות

1. $2 : \frac{1}{2} = 2 \times \frac{2}{1} = 4$
2. $3 : \frac{1}{3} = 3 \times \frac{3}{1} = 9$
3. $\frac{1}{4} : \frac{1}{2} = \frac{1}{4} \times \frac{2}{1} = \frac{2}{4} = \frac{1}{2}$
4. $\frac{2}{5} : 3 = \frac{2}{5} \times \frac{1}{3} = \frac{2}{15}$
5. $\frac{10}{12} : \frac{3}{5} = \frac{5}{6} \times \frac{5}{3} = \frac{25}{18} = 1\frac{7}{18}$
6. $\frac{9}{15} : 2 = \frac{9}{15} \times \frac{1}{2} = \frac{9}{30} = \frac{3}{10}$
7. $\frac{4}{6} : \frac{7}{19} = \frac{4}{6} \times \frac{19}{7} = \frac{76}{42} = 1\frac{17}{21}$
8. $\frac{3}{4} : (-2) = \frac{3}{4} \times \frac{-1}{2} = \frac{-3}{8}$
9. $(-5) : \frac{4}{10} = -\frac{50}{4} = -\frac{25}{2} = -12\frac{1}{2}$
10. $-\frac{2}{7} : \frac{15}{21} = \frac{-2}{7} \times \frac{21}{15} = \frac{-42}{105} = \frac{-2}{5}$
11. $\frac{1}{8} : \frac{4}{5} = \frac{1}{8} \times \frac{5}{4} = \frac{5}{32}$
12. $(-3) : \frac{6}{8} = \frac{-24}{6} = -4$
13. $-\frac{14}{18} : \frac{2}{9} = -\frac{7}{9} \times \frac{9}{2} = -\frac{7}{2} = -3\frac{1}{2}$
14. $\frac{24}{30} : \left(-3\frac{3}{15}\right) = \frac{4}{5} \times \frac{-5}{16} = \frac{-1}{4}$
15. $\left(-\frac{2}{3}\right) : \left(\frac{-4}{5}\right) = \frac{2}{3} \times \frac{5}{4} = \frac{10}{12} = \frac{5}{6}$

ט זס אנה אנה

$$16. \left(-\frac{4}{9}\right) : (-3) = \frac{-4}{9} \times \frac{-1}{3} = \frac{4}{27}$$

$$17. \frac{7}{27} : (-49) = \frac{7}{27} \times \frac{-1}{49} = \frac{-1}{189}$$

$$18. \frac{\frac{3}{4}}{\frac{5}{6}} = \frac{3 \times 6}{4 \times 5} = \frac{18}{20} = \frac{9}{10}$$

$$19. \frac{\frac{10}{14}}{\frac{2}{1}} = \frac{10}{14} = \frac{10 \times 1}{2 \times 14} = \frac{10}{28} = \frac{5}{14} \quad \frac{\frac{10}{14}}{2} = \frac{10 \times 1}{2 \times 14} = \frac{10}{28} = \frac{5}{14}$$

$$20. \frac{\frac{34}{76}}{\frac{3}{4}} : \frac{1}{2} = \frac{34 \times 4}{76 \times 3} \times \frac{2}{1} = \frac{272}{228} = 1 \frac{11}{57}$$

$$21. \frac{\frac{1}{8}}{2} : \frac{3}{5} = \frac{1}{16} : \frac{3}{5} = \frac{1}{16} \times \frac{5}{24} = \frac{5}{384}$$

$$22. 3 \frac{9}{17} : 2 \frac{8}{11} = \frac{60}{17} : \frac{30}{11} = \frac{60}{17} \times \frac{11}{30} = \frac{22}{17} = 1 \frac{5}{17}$$

$$23. \frac{x}{12} : \frac{3}{4} = \frac{x}{12} \times \frac{4}{3} = \frac{x}{9}$$

$$24. \frac{\frac{x}{5}}{4} = \frac{x}{20}$$

$$25. \frac{a}{b} : 6 = \frac{a}{b} \times \frac{1}{6} = \frac{a}{6b}$$

$$26. \frac{a}{b} : \frac{5}{7} = \frac{a}{b} \times \frac{7}{5} = \frac{7a}{5b}$$

$$27. \frac{a}{b} : \frac{x}{92} = \frac{92a}{xb}$$

$$28. \frac{\frac{x}{y}}{\frac{x}{xy}} = \frac{x}{xy} = \frac{1}{y}$$

$$29. \frac{\frac{b}{a} : \frac{a}{b}}{\frac{b}{a} \times \frac{a}{b}} = \left(\frac{b}{a}\right)^2 = \frac{b^2}{a^2}$$

$$30. \frac{\frac{\frac{x}{y}}{\frac{a}{b}} : \frac{2}{3}}{\frac{xb}{ay} \times \frac{3}{2}} = \frac{3bx}{2ay}$$

$$31. \frac{2}{6} : 8 : \frac{1}{x} = \frac{1}{3} \times \frac{1}{8} \times x = \frac{x}{24}$$

$$32. \frac{7}{y} : a : \frac{4}{13} = \frac{7}{y} \times \frac{1}{a} \times \frac{13}{4} = \frac{91}{4ay}$$

$$33. x \frac{9}{11} : \left(-\frac{1}{3}\right) = \frac{11x+9}{11} \times \frac{-3}{1} = \frac{-33x-27}{11}$$

$$34. \frac{-b}{2} : \left[-2 \frac{1}{x} : \frac{5}{\frac{7}{x}} \right] = \frac{-b}{2} : \left(\frac{-2x-1}{x} : \frac{5 \times 6}{7x} \right) = \frac{-b}{2} : \left(\frac{-2x-1}{x} \times \frac{7x}{30} \right) = \frac{-b}{2} : \left(\frac{-14x-7}{30} \right) = \frac{-b}{2} \times \left(\frac{30}{-14x-7} \right) = \frac{-15b}{-14x-7}$$

$$35. \frac{6}{-9} : \frac{4}{-a} : \frac{5:a}{3} = \frac{2}{-3} \times \frac{-a}{4} \times \frac{3a}{5} = \frac{6a^2}{60} = \frac{a^2}{10}$$