

13. RAZLOMCI

$$1. \quad \frac{5}{6} - \frac{3}{8} = \frac{5 \cdot 4 - 3 \cdot 3}{24} = \frac{20 - 9}{24} = \frac{11}{24}$$

$$2. \quad \frac{1}{3} + \frac{1}{6} = \frac{2+1}{6} = \frac{3}{6} = \frac{1}{2}$$

$$3. \quad 2\frac{3}{10} + 1\frac{3}{10} = 3\frac{3}{10}$$

$$4. \quad 4\frac{7}{16} - 2\frac{3}{16} = 2\frac{4}{16} = 2\frac{1}{4}$$

$$5. \quad \frac{7}{15} - \frac{2}{5} = \frac{7-2 \cdot 3}{15} = \frac{1}{15}$$

$$6. \quad 1\frac{3}{4} + 2\frac{5}{12} = \frac{7}{4} + \frac{29}{12} = \frac{7 \cdot 3 + 29}{12} = \frac{50}{12} = 4\frac{2}{12} = 4\frac{1}{6}$$

$$7. \quad \frac{1}{2} \times \frac{3}{5} = \frac{3}{10} \quad ; \quad \frac{3}{4} \times \frac{8}{15} = \frac{\cancel{3}}{4} \times \frac{\cancel{8}}{\cancel{15}} = \frac{1 \cdot 2}{1 \cdot 5} = \frac{2}{5}$$

$$8. \quad \frac{3}{7} \div \frac{4}{5} = \frac{3}{7} \times \frac{5}{4} = \frac{15}{28} \quad ; \quad \frac{2}{11} \div \frac{3}{5} = \frac{2}{11} \times \frac{5}{3} = \frac{10}{33}$$

$$9. \quad \frac{(4+6) \times 6}{12 - (8-2)} = \frac{10 \times 6}{12-6} = \frac{60}{6} = 10 \quad ; \quad \frac{(11-3) \div 2}{2 + (6-4)} = \frac{8 \times \frac{1}{2}}{2+2} = \frac{4}{4} = 1$$

$$10. \quad \frac{42 \div 3}{13 - (1+5)} = \frac{42 \times \frac{1}{3}}{13-6} = \frac{42}{7} = \frac{42}{21} = 2 \quad ; \quad \frac{10}{21} \times \frac{7}{15} = \frac{\cancel{10}}{\cancel{21}} \times \frac{\cancel{7}}{\cancel{15}} = \frac{2 \cdot 1}{3 \cdot 3} = \frac{2}{9}$$

$$11. \quad \frac{(1+6) \times 8}{9 - (2+3)} = \frac{7 \times 8}{9-5} = \frac{56}{4} = 14 \quad ; \quad 7\frac{2}{3} - 5\frac{4}{5} = \frac{23}{3} - \frac{29}{5} = \frac{23 \cdot 5 - 29 \cdot 3}{15} = \frac{28}{15} = 1\frac{13}{15}$$

$$12. \quad (-2) \times (-13) - 63 \div 9 = 26 - 7 = 19$$

$$13. \quad \frac{20 + (-12) \div (-3)}{(-4 + 12) \div (-2)} = \frac{20 + \left(\frac{-12}{-3}\right)}{\frac{8}{-2}} = \frac{20 + 4}{-4} = \frac{24}{-4} = -6$$

$$14. \quad \frac{19 - 5 \times (-3)}{24 \div (-4) - 11} = \frac{19 - (-15)}{(-6) - 11} = \frac{34}{-17} = -2$$

$$15. \quad -2\frac{3}{4} - \left(\frac{-4}{5}\right) = -\frac{11}{4} + \frac{4}{5} = \frac{(-11) \cdot 5 + 4 \cdot 4}{20} = \frac{-55 + 16}{20} = \frac{-39}{20} = -1\frac{19}{20}$$

$$16. \quad -3\frac{3}{8} \times \frac{-2}{3} \div \left(-1\frac{3}{4}\right) = -\frac{27}{8} \times \frac{-2}{3} \div \left(-\frac{7}{4}\right) = \frac{27 \cdot 2}{8 \cdot 3} \times \left(\frac{-4}{7}\right) = -\frac{\cancel{27} \cdot \cancel{2} \cdot 4}{\cancel{8} \cdot \cancel{3} \cdot 7} = -\frac{9}{7} = -1\frac{2}{7}$$

$$17. \quad \left(6\frac{3}{4} - \frac{-5}{8}\right) \div 2\frac{1}{3} = \left(\frac{27}{4} + \frac{5}{8}\right) \div \frac{7}{3} = \frac{27 \cdot 2 + 5 \cdot 1}{8} \times \frac{3}{7} = \frac{59}{8} \times \frac{3}{7} = \frac{177}{56} = 3\frac{9}{56}$$

$$18. \quad -2\frac{1}{4} \times \left(1\frac{3}{4} - 5\frac{1}{2}\right) = -\frac{9}{4} \times \left(\frac{7}{4} - \frac{11}{2}\right) = -\frac{9}{4} \times \left(\frac{7 - 11 \cdot 2}{4}\right) = -\frac{9}{4} \times \left(\frac{-15}{4}\right) = \frac{135}{16} = 8\frac{7}{16}$$

$$19. \quad -2\frac{1}{3} + \left(\frac{3}{-4}\right) \times \left(-1\frac{5}{6}\right) = -\frac{7}{3} + \left(\frac{3}{-4}\right) \times \left(-\frac{11}{6}\right) = -\frac{7}{3} + \left(\frac{3 \cdot 11}{-4 \cdot -6}\right) = -\frac{7}{3} + \frac{33}{24} = \\ = \frac{-7 \cdot 8 + 33}{24} = -\frac{23}{24}$$

$$20. \quad \frac{2}{5} \times \frac{-1}{2} + \left(-1\frac{3}{4}\right) = \frac{-2}{10} - \frac{7}{4} = \frac{-4 - 35}{20} = -\frac{39}{20} = -1\frac{19}{20}$$

$$21. \quad -\frac{15}{16} \times 3\frac{1}{5} \div \left(-1\frac{2}{3}\right) = -\frac{\cancel{15}}{\cancel{16}} \times \frac{\cancel{16}}{\cancel{5}} \div \left(-\frac{5}{3}\right) = -3 \cdot \left(-\frac{3}{5}\right) = \frac{9}{5} = 1\frac{4}{5}$$

$$22. \quad \frac{-2}{5} + \frac{3}{-4} - 2\frac{2}{3} = \frac{-2}{5} + \frac{-3}{4} - \frac{8}{3} = \frac{-2 \cdot 12 - 3 \cdot 15 - 8 \cdot 20}{60} = -\frac{229}{60} = -3\frac{49}{60}$$