



# תרגול פסיכומטרי - מלחמת שברים - פתרונות

$$1. \quad \frac{2}{3} + \frac{2}{5} = \frac{10}{15} + \frac{6}{15} = \frac{10+6}{15} = \frac{16}{15} = 1\frac{1}{15}$$

$$2. \quad 4\frac{1}{2} + 5\frac{2}{3} = 4 + 5 + \frac{1}{2} + \frac{2}{3} = 9 + \frac{1}{2} + \frac{2}{3} = 9 + \frac{3}{6} + \frac{4}{6} = 9 + \frac{7}{6} = 9 + 1\frac{1}{6} = 10\frac{1}{6}$$

$$3. \quad 2 + \frac{1}{2} \cdot \frac{1}{5} = 2 + \frac{1 \cdot 1}{2 \cdot 5} = 2 + \frac{1}{10} = 2\frac{1}{10}$$

$$4. \quad \frac{1}{5} + \frac{3}{4} \cdot \frac{6}{5} = \frac{1}{5} + \frac{3}{2} \cdot \frac{3}{5} = \frac{1}{5} + \frac{3 \cdot 3}{2 \cdot 5} = \frac{1}{5} + \frac{3 \cdot 3}{2 \cdot 5} = \frac{1}{5} + \frac{9}{10} = \frac{2}{10} + \frac{9}{10} = \frac{11}{10} = 1\frac{1}{10}$$

$$5. \quad \frac{2}{5} \div \frac{3}{4} = \frac{2}{5} \cdot \frac{4}{3} = \frac{2 \cdot 4}{5 \cdot 3} = \frac{8}{15}$$

$$6. \quad 0.2 \cdot 2.5 = \frac{1}{5} \cdot 2\frac{1}{2} = \frac{1}{5} \cdot \frac{5}{2} = \frac{1 \cdot \cancel{5}}{\cancel{5} \cdot 2} = \frac{1}{2} = 0.5$$

$$7. \quad 1.25 \cdot 0.8 \cdot 0.75 = 1\frac{1}{4} \cdot \frac{4}{5} \cdot \frac{3}{4} = \frac{\cancel{4}}{\cancel{4}} \cdot \frac{\cancel{4}}{\cancel{4}} \cdot \frac{3}{4} = \frac{3}{4} = 0.75$$

$$8. \quad 0.75 \div 1.25 = \frac{3}{4} \div 1\frac{1}{4} = \frac{3}{4} \div \frac{5}{4} = \frac{3}{4} \cdot \frac{\cancel{4}}{\cancel{4}} = \frac{3}{5}$$

$$9. \quad \frac{2}{5} + \frac{1}{2} - \frac{1}{7} + \frac{1}{10} = \frac{2}{5} + \frac{1}{2} + \frac{1}{10} - \frac{1}{7} = \frac{4}{10} + \frac{5}{10} + \frac{1}{10} - \frac{1}{7} =$$

$$\frac{4+5+1}{10} - \frac{1}{7} = \frac{10}{10} - \frac{1}{7} = 1 - \frac{1}{7} = \frac{6}{7}$$

$$10. \quad 1\frac{1}{4} \cdot \frac{4}{5} = \frac{\cancel{4}}{\cancel{4}} \cdot \frac{\cancel{4}}{\cancel{4}} = 1$$

$$11. \quad \frac{2}{3} \cdot 1\frac{1}{3} \cdot 1.25 \cdot 1.2 \cdot \frac{4}{3} \cdot 0.5 = \frac{2}{3} \cdot \frac{4}{3} \cdot 1\frac{1}{4} \cdot 1\frac{1}{5} \cdot \frac{4}{3} \cdot \frac{1}{2} = \frac{2}{3} \cdot \frac{4}{3} \cdot \frac{\cancel{4}}{\cancel{4}} \cdot \frac{\cancel{5}}{\cancel{5}} \cdot \frac{4}{\cancel{3}} \cdot \frac{1}{\cancel{2}} = \frac{2 \cdot 4}{3 \cdot 3} = \frac{8}{9}$$

$$12. \quad \frac{2\frac{3}{5} - 1\frac{2}{3}}{\frac{2}{3} - \frac{3}{5}} = \frac{\frac{13}{5} - \frac{5}{3}}{\frac{2}{3} - \frac{3}{5}} = \frac{\frac{39}{15} - \frac{25}{15}}{\frac{2}{3} - \frac{3}{5}} = \frac{\frac{14}{15}}{\frac{2}{3} - \frac{3}{5}} = \frac{\frac{14}{15}}{\frac{10}{15} - \frac{9}{15}} = \frac{\frac{14}{15}}{\frac{1}{15}} = \frac{14}{15} \cdot \frac{15}{1} = \frac{14 \cdot \cancel{15}}{\cancel{15}} = \frac{14}{1} = 14$$

$$13. \quad \left(\frac{1}{5}\right)^2 - \frac{1}{5} \cdot \frac{1}{4} = \left(\frac{1^2}{5^2}\right) - \frac{1 \cdot 1}{5 \cdot 4} = \left(\frac{1}{25}\right) - \frac{1}{20} = \frac{4}{100} - \frac{5}{100} = \frac{4-5}{100} = -\frac{1}{100}$$