

Бројевни изрази

1. Израчунај:

$$\begin{aligned}
 1) \quad & \left(1\frac{1}{3} - 0,75\right) : \left(\frac{8}{9} - \frac{5}{6}\right) = \\
 & = \left(\frac{4}{3} - \frac{3}{4}\right) : \left(\frac{16}{18} - \frac{15}{18}\right) \\
 & = \left(\frac{16}{12} - \frac{9}{12}\right) : \frac{1}{18} \\
 & = \frac{7}{12^2} \cdot \frac{18^3}{1} \\
 & = \frac{21}{2} \\
 & = \boxed{10\frac{1}{2}}
 \end{aligned}$$

$$\begin{aligned}
 2) \quad & 1\frac{1}{3} - 0,75 : \left(\frac{8}{9} - \frac{5}{6}\right) = \\
 & = \frac{4}{3} - \frac{3}{4} : \left(\frac{16}{18} - \frac{15}{18}\right) \\
 & = \frac{4}{3} - \frac{3}{4} : \frac{1}{18} \\
 & = \frac{4}{3} - \frac{3}{4} \cdot \frac{18^9}{1} \\
 & = \frac{4}{3} - \frac{27}{2} \\
 & = \frac{8}{6} - \frac{81}{6} \\
 & = -\frac{73}{6} \\
 & = \boxed{-12\frac{1}{6}}
 \end{aligned}$$

$$\begin{aligned}
 3) \quad & \frac{3}{5} + \frac{2}{5} \cdot \left(\frac{1}{2} - \frac{1}{4} : \frac{1}{2}\right) = \\
 & = \frac{3}{5} + \frac{2}{5} \cdot \left(\frac{1}{2} - \frac{1}{\cancel{4}^2} \cdot \frac{\cancel{2}^1}{1}\right) = \\
 & = \frac{3}{5} + \frac{2}{5} \cdot \left(\frac{1}{2} - \frac{1}{2}\right) = \\
 & = \frac{3}{5} + \frac{2}{5} \cdot 0 = \\
 & = \frac{3}{5} + 0 = \\
 & = \boxed{\frac{3}{5}}
 \end{aligned}$$

$$\begin{aligned}
 4) \quad & 2\frac{1}{3} - \frac{5}{6} : (-0,25) + \frac{5}{8} = \\
 & = \frac{7}{3} - \frac{5}{6} : \left(-\frac{1}{4}\right) + \frac{5}{8} \\
 & = \frac{7}{3} - \frac{5}{6^3} \cdot \left(-\frac{\cancel{4}^2}{1}\right) + \frac{5}{8} \\
 & = \frac{7}{3} + \frac{10}{3} + \frac{5}{8} \\
 & = \frac{56}{24} + \frac{80}{24} + \frac{15}{24} \\
 & = \frac{151}{24} \\
 & = \boxed{6\frac{7}{24}}
 \end{aligned}$$

$$\begin{aligned}
 5) \quad & \left(2\frac{1}{3} - \frac{5}{6}\right) : (-0,25) + \frac{5}{8} = \\
 & = \left(\frac{7}{3} - \frac{5}{6}\right) : \left(-\frac{1}{4}\right) + \frac{5}{8} \\
 & = \left(\frac{14}{6} - \frac{5}{6}\right) : \left(-\frac{1}{4}\right) + \frac{5}{8} \\
 & = \frac{9}{6} : \left(-\frac{1}{4}\right) + \frac{5}{8} \\
 & = \frac{\cancel{9}^3}{\cancel{6}^{\cancel{3}^1}} \cdot \left(-\frac{\cancel{4}^2}{1}\right) + \frac{5}{8} \\
 & = -6 + \frac{5}{8} \\
 & = -\frac{48}{8} + \frac{5}{8} \\
 & = -\frac{43}{8} \\
 & = \boxed{-5\frac{3}{8}}
 \end{aligned}$$

$$\begin{aligned}
 6) \quad & 1,8 : (-3) - 1,2 + (1 - 0,9 \cdot (-0,2)) = \\
 & = -0,6 - 1,2 + (1 + 0,18) \\
 & = -1,8 + 1,18 \\
 & = \boxed{-0,62}
 \end{aligned}$$

$$\begin{aligned}
 7) \quad & 29 - 8,5 \cdot (1,6 + 4 \cdot (1,7 - 2,2)) = \\
 & = 29 - 8,5 \cdot (1,6 + 4 \cdot (-0,5)) \\
 & = 29 - 8,5 \cdot (1,6 - 2) \\
 & = 29 - 8,5 \cdot (-0,4) \\
 & = 29 + 3,4 \\
 & = \boxed{32,4}
 \end{aligned}$$