

1) **Berechne:**

a) $\frac{9}{5} - \frac{4}{3}$ b) $\frac{5}{6} \left(\frac{3}{7} - 3 \right)$ c) $\left(4 - \frac{11}{4} \right) : \frac{9}{8}$ d) $\left(\frac{4}{9} - 5 \right) : \left(\frac{7}{18} + \frac{2}{3} \right)$ e) $\left(\frac{13}{6} - \frac{11}{8} \right) : \frac{5}{12} : \left(\frac{7}{5} - 2 \right)$

2) **Löse** die quadratische Gleichung $x^2 - \frac{1}{6}x - \frac{1}{3} = 0$! (Lösungsformel: $x_{1,2} = -\frac{p}{2} \pm \sqrt{\left(\frac{p}{2}\right)^2 - q}$)

3) **Vereinfache:**

a) $3 - \frac{4}{2x-5}$ b) $\frac{3x-2}{4} - \frac{3-x}{6}$ c) $\frac{2x}{1-2x} + \frac{5}{4x-2} - \frac{3}{4}$ d) $\frac{3}{x^2-16} - \frac{2x}{x+4} + \frac{2-x}{x-4}$ e) $\frac{3x}{9-4x^2} + \frac{4-2x}{2x+3} - 5$