

## Lineare Gleichungen - LG 8

Name \_\_\_\_\_ Datum \_\_\_\_\_

**Solve each equation.**

1)  $\frac{1}{2}\left(\frac{3}{2}r + 2\right) + \frac{19}{6}\left(r - \frac{3}{5}\right) = \frac{104}{15}$

2)  $\frac{407}{36} = \frac{3}{2}\left(2x - \frac{1}{2}\right) + \frac{8}{3}\left(x + \frac{4}{3}\right)$

3)  $\frac{277}{15} = \frac{11}{4}\left(\frac{2}{5}n + 1\right) - 5\left(-\frac{8}{5}n + \frac{4}{5}\right)$

4)  $-\frac{1063}{108} = \frac{17}{6}\left(m - \frac{4}{3}\right) + \frac{5}{3}\left(\frac{1}{3}m - \frac{1}{4}\right)$

5)  $-2\left(\frac{2}{5}b + \frac{4}{3}\right) - \frac{8}{3}\left(-\frac{1}{3}b - 2\right) = \frac{122}{45}$

6)  $\frac{277}{100} = \frac{6}{5}\left(3a + \frac{8}{5}\right) - \frac{11}{6}\left(\frac{1}{2}a + 1\right)$

7)  $-\frac{31523}{2700} = -\frac{23}{6}\left(-\frac{4}{3}v + 1\right) - \frac{1}{5}\left(\frac{11}{4}v + \frac{6}{5}\right)$

8)  $-\frac{10}{3}\left(-\frac{3}{2}x + 1\right) - \frac{12}{5}\left(-\frac{7}{5}x - \frac{1}{2}\right) = \frac{1094}{75}$

9)  $-\frac{2473}{450} = -\frac{18}{5}\left(-\frac{10}{3}x + \frac{2}{5}\right) - 2\left(\frac{17}{6}x - \frac{5}{3}\right)$

10)  $\frac{13}{4}\left(\frac{1}{2}k + \frac{1}{3}\right) + \frac{2}{3}\left(k - \frac{3}{2}\right) = \frac{79}{24}$

11)  $-\left(-\frac{5}{2}p + \frac{1}{2}\right) + \frac{10}{7} = -1\frac{1}{8}p + \frac{1629}{224}$

12)  $\frac{27}{8}\left(\frac{17}{6}r - \frac{21}{8}\right) = \frac{293}{64} + \frac{3}{2}r$

13)  $\frac{25}{8} + 2m = -\left(-\frac{1}{8}m + \frac{1}{4}\right) + \frac{9}{2}$

14)  $-\frac{2479}{84} + 4\frac{1}{7}n = -\frac{5}{2}\left(\frac{8}{3}n - \frac{7}{6}\right)$

15)  $\frac{139}{36} - \frac{1}{2}x = \frac{1}{2}\left(\frac{5}{6}x + 1\right)$

16)  $\frac{7}{4}\left(-\frac{5}{4}b + 2\right) + 1 = -\frac{201}{32} - 5b$

17)  $4 - \frac{1}{7}\left(\frac{12}{7}x + \frac{13}{6}\right) = -\frac{1265}{588} - 3\frac{3}{4}x$

18)  $-\frac{6}{5}v + \frac{1061}{180} = -\frac{23}{6} - \frac{5}{3}\left(\frac{9}{2}v - \frac{1}{6}\right)$

19)  $\frac{13}{8}\left(\frac{19}{8}x + \frac{3}{4}\right) = \frac{1001}{288} + 2\frac{1}{6}x$

20)  $\frac{7}{4}\left(-\frac{2}{5}n + \frac{10}{7}\right) = 3\frac{3}{4}n - \frac{167}{40}$

**Löse folgende Gleichungen!**

21)  $-\frac{3}{2}\left(\frac{3}{5}x + \frac{13}{6}\right) = -\frac{899}{80} + \frac{7}{8}x$

22)  $\frac{239}{6} - 2m = \frac{1}{5}m + \frac{29}{8}\left(-4m + \frac{16}{3}\right)$

23)  $\frac{19}{6}\left(\frac{7}{3}n - 2\right) = -\frac{4691}{882} + \frac{2}{7}n$

24)  $-\frac{1441}{196} + 3\frac{2}{7}r = -2\left(\frac{1}{6}r + \frac{17}{8}\right)$