

## Lösungen:

|          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Punkte |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| <b>1</b> | <p>Bitte berechnen Sie die Unbekannten</p> <p>a)</p> $\frac{7}{4t} + \frac{4}{o} = \frac{11}{4}$ $-\frac{3}{8t} + \frac{1}{2o} = -\frac{21}{8}$ <p>L :</p> $t = \frac{1}{5};$ $o = -\frac{2}{3};$ <p>b)</p> $-\frac{7}{8}g + \frac{1}{2}s = -\frac{13}{240}$ $\frac{5}{3}g + 5s = -\frac{47}{6}$ <p>L :</p> $g = -\frac{7}{10};$ $s = -\frac{4}{3};$                                                                                                                                                                                       | 8      |
| <b>2</b> | <p>Bitte berechnen Sie die Unbekannte</p> <p>a) <math>\frac{\frac{2}{3}}{2e+6} + \frac{1}{5} = \frac{41}{105}</math>    L:    <math>e = -\frac{5}{4}</math></p>                                                                                                                                                                                                                                                                                                                                                                            | 2      |
| <b>3</b> | <p>Bitte berechnen Sie die Unbekannten</p> <p>a)</p> $\begin{aligned} -1,7e + 1,1t + 8,2j &= 76,1 \\ -4,7e + 7,7t + 2,2j &= -40,9 \\ -5,8e + 4,1t - 2,5j &= -48,6 \end{aligned}$ <p>L:</p> $\begin{aligned} e &= -3; \\ t &= -10; \\ j &= 10; \end{aligned}$ <p>b)</p> $\begin{aligned} 6(5c + i) + 4(c + 2j) - 3(-8i - 8j) + 9 &= -85 \\ (4c + 4i) + 5(-10c - 3j) - 2(10i + 5j) - 10 &= -159 \\ 5(8c + 8i) - 6(-c - 2j) - 7(-2i + j) + 6 &= -127 \end{aligned}$ <p>L:</p> $\begin{aligned} c &= 8; \\ i &= -9; \\ j &= -3; \end{aligned}$ | 12     |