

Lösungen:

|          |                                                                                                                                                                                                                                                                                                                                                                                                                          | Punkte |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| <b>1</b> | <p>Bitte lösen Sie die Gleichungssysteme</p> <p>a)</p> $\begin{aligned} 6f - 6,5u &= -50,5 \\ 9,9f + 3,6u &= -11,7 \end{aligned}$ <p>L:</p> $\begin{aligned} f &= -3; \\ u &= 5; \end{aligned}$ <p>b)</p> $\begin{aligned} -\frac{3}{5}o + \frac{1}{9}w &= -\frac{47}{54} \\ \frac{3}{5}o + \frac{1}{2}w &= \frac{19}{12} \end{aligned}$ <p>L:</p> $\begin{aligned} o &= \frac{5}{3}; \\ w &= \frac{7}{6} \end{aligned}$ | 8      |
| <b>2</b> | <p>Bitte bestimmen/isolieren Sie die angegebenen Unbekannten</p> $\frac{8gu - 9}{3,9cw - 2,6} - 2,9f = 5,8t \quad [guw]$ <p>L:</p> $\begin{aligned} g &= \frac{22,62ctw - 15,08t + 11,31cfw - 7,54f + 9}{8u} \\ u &= \frac{22,62ctw - 15,08t + 11,31cfw - 7,54f + 9}{8g} \\ w &= \frac{-15,08t - 7,54f - 8gu + 9}{-22,62ct - 11,31cf} \end{aligned}$                                                                     | 6      |
| <b>3</b> | <p>Bitte lösen Sie das Gleichungssystem</p> $\begin{aligned} 3q + 3c + 8x &= 19 \\ 5q - 5c - 2x &= -33 \\ 5q + 2c - 7x &= 28 \end{aligned}$ <p>L:</p> $\begin{aligned} q &= 1; \\ c &= 8; \\ x &= -1; \end{aligned}$                                                                                                                                                                                                     | 6      |
| <b>4</b> | <p>Bitte lösen Sie das Gleichungssystem</p> $\begin{aligned} -8(6m + 6e) - 7(2m - 3e) - 6 &= 202 \\ 5(-10m + 7e) + 6(-m - 5e) - 5 &= -111 \end{aligned}$ <p>L:</p> $\begin{aligned} m &= 1; \\ e &= -10; \end{aligned}$                                                                                                                                                                                                  | 4      |