

Lösungen:

<p>1</p>	<p>Bitte berechnen Sie die Unbekannten</p> <p>a)</p> $- 6,4m - 6,9w + 6,4f = 78,3$ $- 7,8m - 7,8w + 3,5f = 50,6$ $- 7,1m - 4,1w + 8,3f = 88,2$ <p>L:</p> $m = 1;$ $w = -3;$ $f = 10;$ <p>b)</p> $- 4,6q - 5,4g - 8,7n = -40,72$ $- 7,5q - 3,2g - 5n = -33,45$ $- 5,7q - 9,8g - 4,7n = -86,61$ <p>L:</p> $q = 1,9;$ $g = 8,5;$ $n = -1,6;$
<p>2</p>	<p>Bitte berechnen Sie die Unbekannte</p> <p>a) $- g^2 - \frac{13}{6} g - \frac{5}{6} = 0$ L: $g_1 = -\frac{1}{2} ; g_2 = -\frac{5}{3}$</p> <p>b) $\frac{-3}{2} d^2 + \frac{15}{4} d - \frac{63}{32} = 0$ L: $d_1 = \frac{7}{4} ; d_2 = \frac{3}{4}$</p> <p>c) $- 86,4m + 215,28 = -8m^2$ L: $m_1 = 3,9; m_2 = 6,9;$</p> <p>d) $3x^2 = 42x - 136,17$ L: $x_1 = 5,1; x_2 = 8,9;$</p> <p>e) $t^2 - (-\frac{3}{8}t + 2) + \frac{6}{7}t^2 = \frac{5}{8}t^2 - \frac{-1}{4}(t + \frac{5}{4}) + \frac{-135}{112}$ L: $t_1 = -1 ; t_2 = \frac{62}{69}$</p> <p>f) $\frac{-3}{-2p-2} - \frac{-6}{-4p+1} = -\frac{5}{4}$ L: $p_1 = 1 ; p_2 = -\frac{7}{4}$</p> <p>g) $\frac{3d+2}{-4d+1} + \frac{3d+8}{-d-3} = -\frac{58}{15}$ L: $d_1 = -8 ; d_2 = \frac{18}{7}$</p>
<p>3</p>	<p>Bitte berechnen Sie die Unbekannten</p> $\frac{2}{q} + \frac{8}{7v} + \frac{7}{r} = \frac{113}{6}$ $- \frac{2}{5q} - \frac{7}{6v} - \frac{9}{2r} = -\frac{79}{8}$ $- \frac{3}{4q} + \frac{9}{4v} + \frac{2}{9r} = -\frac{667}{144}$ <p>L:</p> $q = \frac{3}{5};$ $v = -\frac{4}{7};$ $r = \frac{2}{5};$

4	<p>Bitte berechnen Sie die Unbekannten</p> <p>a)</p> $-4a - p + 3r = \frac{37}{7}$ $-a + \frac{4}{3}p + 5r = -\frac{134}{21}$ $-\frac{9}{7}a - 4p - \frac{1}{7}r = \frac{166}{21}$ <p>L:</p> $a = -2;$ $p = -\frac{9}{7};$ $r = -\frac{4}{3};$ <p>b)</p> $7,2(-6,1i + 4,1c) + 2,9(-6,5i - 3,2c) - 2 = 4,635$ $3(7,3i + 5,1c) + 9,5(-5,6i - 5c) - 4,7 = -238,23$ <p>L:</p> $i = 1,7;$ $c = 5,6;$
5	<p>Bitte berechnen Sie die Unbekannten</p> $-2,4w + 6,3k = -3,99$ $-6c + 9,7k = 20,71$ $4,9w - 5c = 17,28$ <p>L:</p> $w = -2,8;$ $c = -6,2;$ $k = -1,7;$