Lösungen:

1	Bitte lösen Sie die Gleichungssysteme

a)   2,9u – 6,3m = -34,53
     - 9,1u +   8m = 25,97

L:
u = 3,3;
m = 7;

b) - 4,4y - 1,4h = 9,7
      6,8y + 2,6h = -11,98

L:
y = -4,4;
h = 6,9;

c) - 2,1(3,7o - 1,4v) - 2,4(1,8o + 1,5v) + 4,7 = -21,262
    - 2,1(4,9o - 4,4v) - 4,5(1,7o - 2,5v) + 2,9 = 22,343

L:
o = 2;
v = 2,7;

d) - 2,7(-3,6x - 1,3a) + 5,7(5,5x + 2,1a) - 2,5 = -13,114
3,7(5x - 5,3a) + 5,9(-4,3x + 5,8a) + 1,5 = -72,402

L:
x = 1,4;
a = -4,4;

e)

$$-\frac{5}{3}g + \frac{5}{2}i = 1$$

$$-\frac{3}{4}g + \frac{2}{3}i = \frac{13}{90}$$

L :

$$g = \frac{2}{5};$$

$$i = \frac{2}{3};$$

f)

$$-\frac{2}{7}z + \frac{15}{7}k = -\frac{73}{77}$$

$$-\frac{15}{14}z - \frac{1}{2}k = \frac{185}{44}$$

L :

$$z = -\frac{7}{2};$$

$$k = -\frac{10}{11}$$

2   Bitte lösen Sie die Gleichungssysteme

a)

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   16p -  x + 9z = -187
 - 11p - 2x + 8z = 122
    6p + 5x + 5z = 3
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L:
p = -12;
x = 13;
z = 2;

b)

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 1,7y + 3,7d - 1,9k = 6,55
- 5,1y -    d + 3,8k = -38,93
- 5,9y +   4d - 4,5k = -8,91
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L:
y = 3,9;
d = -3;
k = -5,8;

c) - 5(3,7q + 5r) + 4,6(q + 3,7d) + 2,8(3,8r + 4,4d) + 3,4 = 87,56
     2,2(4,9q - 1,2r) - 1,5(2,9q - 4,6d) + 2(1,3r + d) + 1 = -26,99
     (-1,4q + 2,5r) - 1,8(2,8q + 2,2d) - 2(4,8r - 4d) + 1,3 = 52,08

L:
q = -3;
 r = -5;
d = -1;

d)

$$\frac{4}{5}w + 4b + \frac{1}{4}e \; = \; -\frac{103}{20}$$

$$- w - \frac{1}{3}b + 2e \; = \; \frac{7}{4}$$

$$\frac{1}{3}w - 3b - \frac{3}{5}e \; = \; \frac{83}{20}$$

$$L:$$

$$w = \frac{3}{4};$$

$$b = -\frac{3}{2};$$

$$e = 1;$$

e)

$$-\frac{5}{2}b - 5h + \frac{1}{2}x \; = \; \frac{1}{6}$$

$$-\frac{1}{2}b + \frac{1}{3}h - \frac{1}{5}x \; = \; \frac{3}{5}$$

$$- b + h - \frac{1}{5}x \; = \; \frac{16}{15}$$

$$L:$$

$$b = -\frac{2}{3};$$

$$h = \frac{1}{5};$$

$$x = -1;$$

Bitte lösen Sie die Gleichungssysteme