**1 Solve[{2 x - 2 y == 4, 2 x + 2 y == 20}, {x, y}]**

$\{\{x \to 6, y \to 4\}\}$

**2 Solve[{4.5 x + 4 y == 100, 3 x - 8 y == 10 }, {x, y}]**

$\{\{x \to 17.5, y \to 5.3125\}\}$

**3 Solve[{3 x + 7 y == 60, 2 x + 18 y == 80 }, {x, y}]**

$\{\{x \to 13, y \to 3\}\}$

**4 Solve[{5 x - y == 7, -x + 5 y == 1 / 7 }, {x, y}]**

$\{\{x \to \frac{41}{28}, y \to \frac{9}{28}\}\}$

**5 Solve[{81 x - 9 y == 1, 9 x + 81 y == 1 }, {x, y}]**

$\{\{x \to \frac{5}{369}, y \to \frac{4}{369}\}\}$

**6 Solve[{8.8 x + 1.1 y == 4.4, 9.9 x + 5.5 y == -7.7 }, {x, y}]**

$\{\{x \to 0.870968, y \to -2.96774\}\}$

**7 Solve[{-3 x + y == 6, 9 + 5 y == x }, {x, y}]**

$\{\{x \to -\frac{39}{14}, y \to -\frac{33}{14}\}\}$

**8 Solve[{x - 7 y == -49, -2 x + y == 98}, {x, y}]**

$\{\{x \to -49, y \to 0\}\}$

**9 Solve[{6 x / 5 - 7 y / 10 == 1, 10 y + 7 x / 2 == 35 / 12}, {x, y}]**

$\{\{x \to \frac{5}{6}, y \to 0\}\}$

**10 Solve[{2 $\left(\frac{x - 3 y}{7}\right)$ == 1 / 14, 1 - x - 7 y == 15 / 4}, {x, y}]**

$\{\{x \to -\frac{13}{20}, y \to -\frac{3}{10}\}\}$

**11 Solve[{$\frac{x - y}{2 x - y}$ == 5 / 11, (9 - 3 y) * 2 == -x}, {x, y}]**

$\{\}$

**12 Solve[{$\frac{y}{x - y}$ == 1, 3 y - x == 18}, {x, y}]**

$\{\{x \to 36, y \to 18\}\}$

**13 Solve[{(x / 2) + y == 20, y - 2 x == -20}, {x, y}]**

$\{\{x \to 16, y \to 12\}\}$

**14** $\text{Solve}\left[\left\{(x-10)/2 + \frac{y+5}{8} == 3x, \frac{4y+1}{5} - \frac{3x}{15} == y/3\right\}, \{x, y\}\right]$

$\left\{\left\{x \to -\frac{248}{137}, y \to -\frac{165}{137}\right\}\right\}$

**15** $\text{Solve}\left[\left\{\frac{1-x-y}{7} == x/21, \frac{x-y}{3} == 1\right\}, \{x, y\}\right]$

$\left\{\left\{x \to \frac{12}{7}, y \to -\frac{9}{7}\right\}\right\}$

**16** $\text{Solve}\left[\left\{\frac{1-x}{-x} + x/3 == x - 1, \frac{y}{1-2y} + y/6 == \frac{1-y}{-6}\right\}, \{x, y\}\right]$

$\left\{\left\{y \to -\frac{1}{4}, x \to \frac{1}{2}(3-\sqrt{3})\right\}, \left\{y \to -\frac{1}{4}, x \to \frac{1}{2}(3+\sqrt{3})\right\}\right\}$

**17** $\text{Solve}\left[\{x/9 + y == x, 1 - y/2 == x\}, \{x, y\}\right]$

$\left\{\left\{x \to \frac{9}{13}, y \to \frac{8}{13}\right\}\right\}$

**18** $\text{Solve}\left[\left\{9x - 8y == 0, \frac{x-y}{2} - y == x\right\}, \{x, y\}\right]$

$\{\{x \to 0, y \to 0\}\}$

**19** $\text{Solve}\left[\left\{1 + x/3 - \frac{1}{x-y} == x/3, 2x - 3y == 6\right\}, \{x, y\}\right]$

$\{\{x \to -3, y \to -4\}\}$

**20** $\text{Solve}\left[\left\{\frac{2x+3y+4}{5} == \frac{x+2y+3}{4}, \frac{-x-2y-3}{4} == \frac{-2y-3x-4}{5}\right\}, \{x, y\}\right]$

$\left\{\left\{x \to -\frac{1}{5}, y \to -\frac{1}{5}\right\}\right\}$

**21** $\text{Solve}\left[\left\{\frac{x-(5-y)}{1+y} == 9, \frac{x-y}{x+y} == 5/9\right\}, \{x, y\}\right]$

$\left\{\left\{x \to -\frac{98}{9}, y \to -\frac{28}{9}\right\}\right\}$

**22** $\text{Solve}\left[\left\{6 == \frac{1-6x}{6y}, 7 == 63 * \frac{1-7y}{25x}\right\}, \{x, y\}\right]$

$\left\{\left\{x \to \frac{1}{2}, y \to -\frac{1}{18}\right\}\right\}$

**23** $\text{Solve}\left[\left\{\frac{1}{x-y-2} == 1/x, \frac{4}{1-x} == \frac{1}{y-1}\right\}, \{x, y\}\right]$

$\{\{x \to 13, y \to -2\}\}$

**24** $\text{Solve}\left[\left\{\dfrac{2\,y - x}{18} - \dfrac{3\,x + y}{9} == 1/36,\ \dfrac{4\,x - 9\,y}{3} - \dfrac{8\,x - 8\,y}{6} == 1/12\right\},\ \{x,\,y\}\right]$

$\left\{\left\{x \to -\dfrac{1}{14},\ y \to -\dfrac{1}{20}\right\}\right\}$

**25** $\text{Solve}\left[\left\{\dfrac{21\,x - y}{3} == 8\,x/2 + 9 * \dfrac{x + 1}{3},\ y + x * (1 - y) - 1 == 1 - x * (1 + y) + 1 + 2\,x\right\},\ \{x,\,y\}\right]$

$\{\}$

**26** $\text{Solve}\left[\left\{\dfrac{2\,x - 1}{y + 1} == \dfrac{2\,x}{y - 1},\ \dfrac{2\,x + 1}{x + 10} == \dfrac{2\,(3 + y)}{y - 1}\right\},\ \{x,\,y\}\right]$

$\left\{\left\{x \to \dfrac{20}{17},\ y \to -\dfrac{63}{17}\right\}\right\}$

**27** $\text{Solve}\left[\left\{-\dfrac{2\,x + 3\,y}{5} + \dfrac{-3\,x - y}{4} == 1,\ \dfrac{-2\,x}{3} - \dfrac{-3\,x - y}{-4} == -1\right\},\ \{x,\,y\}\right]$

$\left\{\left\{x \to \dfrac{6}{5},\ y \to -\dfrac{14}{5}\right\}\right\}$

**28** $\text{Solve}[\{14\,x + y/2 == 188,\ 6\,x + y/8 == 159/2\},\ \{x,\,y\}]$

$\{\{x \to 13,\ y \to 12\}\}$

**29** $\text{Solve}\left[\left\{\dfrac{x - 12}{7 - y} == \dfrac{x - 13}{11 - y},\ \dfrac{2\,x + 4}{10 + x} == \dfrac{34 - 2\,y}{18 - y}\right\},\ \{x,\,y\}\right]$

$\{\{x \to 14,\ y \to 15\}\}$

**30** $\text{Solve}\left[\left\{\dfrac{3\,x - 2\,y}{3\,x - y} == 10/16,\ x + y == 20\right\},\ \{x,\,y\}\right]$

$\{\{x \to 11,\ y \to 9\}\}$

**31** $\text{Solve}\left[\left\{\dfrac{2\,y - 8}{4} + \dfrac{x + 3}{20} == 3/4,\ \dfrac{4\,x - y}{3} - \dfrac{3\,x - 1}{10} == 1/2\right\},\ \{x,\,y\}\right]$

$\{\{x \to 2,\ y \to 5\}\}$

**32** $\text{Solve}[\{5\,x/2 - 10\,y/3 == 10,\ 22\,x/3 - 11\,y/2 == 55\},\ \{x,\,y\}]$

$\{\{x \to 12,\ y \to 6\}\}$

**33** $\text{Solve}[\{-x + 2\,y == 1,\ 2\,x + 4\,y == 6 + 4\,x\},\ \{x,\,y\}]$

$\{\}$

34 $\text{Solve}\left[\left\{\dfrac{7\,x+4\,y}{3}-\dfrac{8\,(x-2\,y)}{4}=7-x+7\,y,\ 2\,x-y\,/\,3+7=\dfrac{x-3\,y}{3}\right\},\ \{x,\,y\}\right]$

$\left\{\left\{x\rightarrow-\dfrac{21}{11},\ y\rightarrow-\dfrac{63}{11}\right\}\right\}$

35 $\text{Solve}[\{2\,/\,x-3\,/\,y=0,\ 3\,(x+1)-2\,(y-3)=2\,x+1\},\ \{x,\,y\}]$

$\{\{x\rightarrow4,\ y\rightarrow6\}\}$

36 $\text{Solve}\Big[\Big\{\dfrac{7\,y-x}{4}-\dfrac{6\,x-4\,y+2}{7}=\dfrac{3\,x+1}{14}+\dfrac{1}{21}\,(4\,x+6\,y+6),$

$\dfrac{3\,x+3}{5}+\dfrac{2\,x+y+2}{3}=\dfrac{9\,y-2\,x}{15}+\dfrac{5\,x+2\,y+1}{5}\Big\},\ \{x,\,y\}\Big]$

$\{\{x\rightarrow9,\ y\rightarrow7\}\}$

37 $\text{Solve}\left[\left\{\dfrac{a\,x}{2}+\dfrac{y}{2\,a+2\,b}=a-b,\ \dfrac{a\,y}{a-b}-a\,b\,x=a^2+b^2\right\},\ \{x,\,y\}\right]$

$\{\{y\rightarrow2\,a^2-a\,a\,x-a\,x\,b-2\,b^2\}\}$

38
$\text{Solve}\left[\left\{\dfrac{4\,y+x}{12}+\dfrac{2\,x-1}{6}-24=12\,x-y\,/\,2,\ \dfrac{6\,y+2\,x+1}{6}+\dfrac{x-7\,y}{12}=-y+\dfrac{x+12}{12}-x\,/\,4\right\},\ \{x,\,y\}\right]$

$\left\{\left\{x\rightarrow-\dfrac{1610}{811},\ y\rightarrow\dfrac{1140}{811}\right\}\right\}$

39 $\text{Solve}\left[\left\{\dfrac{u\,x-v\,y}{4\,x}-\dfrac{v\,y}{2}=\dfrac{u-v\,y}{2},\ \dfrac{u-3\,x}{2}+\dfrac{v-3\,y}{6}=1\right\},\ \{x,\,y\}\right]$

$\left\{\left\{y\rightarrow-2+u+\dfrac{v}{3}+\dfrac{3\,(-u\,x+v\,y)}{2\,u},\ x\rightarrow-\dfrac{-u\,x+v\,y}{2\,u}\right\}\right\}$

40 $\text{Solve}\Big[$
$\left\{\dfrac{7\,x-y}{4}-\dfrac{2\,(1-y)}{44}=\dfrac{4\,x-y+1}{11}+6\,y\,/\,22,\ \dfrac{x-4\,y}{11}+1\,/\,2=\dfrac{-2\,(1-y)}{44}+\dfrac{5\,x-2\,y}{2}\right\},\ \{x,\,y\}\Big]$

$\left\{\left\{x\rightarrow\dfrac{7}{6},\ y\rightarrow\dfrac{23}{6}\right\}\right\}$

41 $\text{Solve}\left[\left\{\dfrac{r}{s-2\,x}+\dfrac{4\,s}{s+2\,x}=\dfrac{1}{s^2-4\,x^2},\ 1\,/\,x-\dfrac{1}{s+r+y}=\dfrac{1}{x-r}\right\},\ \{x,\,y\}\right]$

$\left\{\left\{y\rightarrow\dfrac{-1+2\,r^2-4\,r^4-6\,r\,s+26\,r^3\,s+8\,s^2-33\,r^2\,s^2-40\,r\,s^3-16\,s^4}{4\,r\,(r-4\,s)^2},\ x\rightarrow\dfrac{1-r\,s-4\,s^2}{2\,(r-4\,s)}\right\}\right\}$

42 $\text{Solve}\left[\left\{1+\dfrac{2\,x-3\,y+4}{5}-\dfrac{6\,x-20\,y}{5}+\dfrac{24\,x}{10}=0,\ 1-\dfrac{6\,y+20\,x}{5}+36\,y\,/\,30=0\right\},\ \{x,\,y\}\right]$

$\left\{\left\{x\rightarrow\dfrac{1}{4},\ y\rightarrow-\dfrac{11}{17}\right\}\right\}$

**43 Solve[{y / 2 == 3 / 4 * x, x * y == 54}, {x, y}]**

*Out[3]=* $\{\{x \to -6, y \to -9\}, \{x \to 6, y \to 9\}\}$

**44 Solve[{3 x^2 + 4 y^2 == 16, 3 y^2 + 4 x^2 == 19}, {x, y}]**

$\{\{x \to -2, y \to -1\}, \{x \to -2, y \to 1\}, \{x \to 2, y \to -1\}, \{x \to 2, y \to 1\}\}$

**45 Solve[{3 x / 2 + 2 y == 17, x * y / 2 == 12}, {x, y}]**

*Out[4]=* $\left\{\left\{x \to \frac{16}{3}, y \to \frac{9}{2}\right\}, \{x \to 6, y \to 4\}\right\}$

**46 Solve[{2 x^2 - 6 y * x + 2 y^2 == 88, y * x == 20}, {x, y}]**

*Out[6]=* $\{\{x \to -10, y \to -2\}, \{x \to -2, y \to -10\}, \{x \to 2, y \to 10\}, \{x \to 10, y \to 2\}\}$

**47 Solve[{5 x / 2 + 10 y == 8, 1 / y * x == 1}, {x, y}]**

*Out[7]=* $\left\{\left\{x \to \frac{16}{25}, y \to \frac{16}{25}\right\}\right\}$

**48 Solve[{4 x^2 - 2 y^2 == 64, x / 2 - y == 2}, {x, y}]**

$\left\{\left\{x \to -\frac{36}{7}, y \to -\frac{32}{7}\right\}, \{x \to 4, y \to 0\}\right\}$

**49 Solve[{x^2 + y^2 == 125, x^2 / 5 - y^2 / 10 == 0}, {x, y}]**

$\left\{\left\{x \to -5\sqrt{\frac{5}{3}}, y \to -5\sqrt{\frac{10}{3}}\right\}, \left\{x \to -5\sqrt{\frac{5}{3}}, y \to 5\sqrt{\frac{10}{3}}\right\},\right.$

$\left.\left\{x \to 5\sqrt{\frac{5}{3}}, y \to -5\sqrt{\frac{10}{3}}\right\}, \left\{x \to 5\sqrt{\frac{5}{3}}, y \to 5\sqrt{\frac{10}{3}}\right\}\right\}$

**50 Solve$\left[\left\{\frac{a(2-y)}{3} == \frac{x+a}{b}, ((y-x)^2)/4 == 1 - \frac{y*x - \frac{x^2}{2}}{2}\right\}, \{x, y\}\right]$**

*Out[8]=* $\left\{\{x \to -a, y \to 2\}, \left\{x \to -a + \frac{4ab}{3}, y \to -2\right\}\right\}$

$\left\{\left\{x \to \frac{1}{9+6ab}\left(a\left(-9 + 2ab^2 - b\left(-6 + 3a + \sqrt{a^2(3-2b)^2 - 18(-2+yx) - 12ab(-2+yx)}\right)\right)\right),\right.\right.$

$\left.y \to \frac{a(-3+2b) + \sqrt{a^2(3-2b)^2 - 18(-2+yx) - 12ab(-2+yx)}}{3+2ab}\right\},$

$\left\{x \to \frac{1}{9+6ab}\left(a\left(-9 + 2ab^2 + b\left(6 - 3a + \sqrt{a^2(3-2b)^2 - 18(-2+yx) - 12ab(-2+yx)}\right)\right)\right),\right.$

$\left.\left.y \to \frac{-3a + 2ab - \frac{1}{2}\sqrt{a^2(6-4b)^2 - 24(3+2ab)(-2+yx)}}{3+2ab}\right\}\right\}$

**51 Solve[{x / 2 + y / 2 == a, y * x == a^2 - b^2}, {x, y}]**

*Out[9]=* $\{\{x \to a - b, y \to a + b\}, \{x \to a + b, y \to a - b\}\}$

**52** `Solve[{x + 2 y == 20, x^2 + y^2 == 100}, {x, y}]`

$\{\{x \to 0, y \to 10\}, \{x \to 8, y \to 6\}\}$

**53** `Solve[{`$\frac{15}{3 x + 9}$ + $\frac{4}{2 y - 2}$ == 2, 1/x - $\frac{3}{4 y}$ == 1/4`}, {x, y}]`

$\left\{\left\{x \to -\frac{7}{5}, y \to -\frac{7}{9}\right\}, \{x \to 2, y \to 3\}\right\}$

**54** `Solve[{`$\frac{x^2}{y^2}$ + x/y == 10/9, x*y == 6`}, {x, y}]`

*Out[10]=* $\left\{\{x \to -2, y \to -3\}, \{x \to 2, y \to 3\}, \left\{x \to -i\sqrt{10}, y \to 3 i\sqrt{\frac{2}{5}}\right\}, \left\{x \to i\sqrt{10}, y \to -3 i\sqrt{\frac{2}{5}}\right\}\right\}$

**Mit drei Variablen :**

**55** `Solve[{x == 1 + 2 x, y == x + z, z == 2 + x}, {x, y, z}]`

$\{\{x \to -1, y \to 0, z \to 1\}\}$

**56** `Solve[{2 x + y - z == 10, z - 5 y + x == 5, -6 x == -30 + y + z }, {x, y, z}]`

$\{\{x \to 5, y \to 0, z \to 0\}\}$

**57** `Solve[{5 x - 2 y + 3 z == -10, 7 x - 9 y + z == 10, 10 x - 4 y + 6 z == 10 }, {x, y, z}]`

$\{\}$

**58** `Solve[{x - 10 y + z == 0, x == 4 z, x + y + z == 12 }, {x, y, z}]`

$\left\{\left\{x \to \frac{96}{11}, y \to \frac{12}{11}, z \to \frac{24}{11}\right\}\right\}$

**59** `Solve[{6 z + y - x == 100, x - 2 y + z == 40, 21 == -3 x + y }, {x, y, z}]`

$\left\{\left\{x \to -\frac{413}{32}, y \to -\frac{567}{32}, z \to \frac{559}{32}\right\}\right\}$

**60** `Solve[{5 x + y - z == 17, x - y == 20 - z, -5 x - y + z == -17 }, {x, y, z}]`

$\left\{\left\{x \to \frac{37}{6}, y \to -\frac{83}{6} + z\right\}\right\}$

**61** `Solve[{-14 x + 7 y + 21 z == 3, -x + 14 y + 6 z == 2, -19 x - 7 y + 23 z == -5 }, {x, y, z}]`

$\{\}$

**62** `Solve[{x - 2 y + 3 z == 1, x - 2 y == -7, x + 3 z == 11 }, {x, y, z}]`

$\left\{\left\{x \to 3, y \to 5, z \to \frac{8}{3}\right\}\right\}$

**63** Solve[{4 x + 2 y - 6 z == -8, -2 x - 2 y - 3 z == 0, -8 y - 16 z == 0 }, {x, y, z}]

$\{\{x \to \frac{1}{2}, y \to -2, z \to 1\}\}$

**64** Solve[{10 x + 6 z == 20, z + 9 x == 18, x + 2 == 4 }, {x, y, z}]

$\{\{x \to 2, z \to 0\}\}$

**65** Solve[{x - y == 7, x + y == 14, x + z == -1 }, {x, y, z}]

$\{\{x \to \frac{21}{2}, y \to \frac{7}{2}, z \to -\frac{23}{2}\}\}$

**66** Solve[{4 x + 8 y == 1, 1 == 3 z + x, 1 == y - x }, {x, y, z}]

$\{\{x \to -\frac{7}{12}, y \to \frac{5}{12}, z \to \frac{19}{36}\}\}$

**67** Solve[{-6 x - 7 y - 41 z == 1, x + 14 y - 6 z == 2, -5 x + 7 y - 47 z == -3 }, {x, y, z}]

{ }

**68** Solve[{4 x + 4 x + 8 z == 4, 2 x + 2 y + 4 z == 2, -3 x - 3 y - 6 z == 4 }, {x, y, z}]

{ }

**69** Solve[{6 x + 25 y - 24 z == 2, -12 x - 7 y + 5 z == 1, 12 x + 2 y == 0 }, {x, y, z}]

{ }

**70** Solve[{x + 4 y - 7 z == 9, y - 9 z == -7, 16 z - 16 == 0 }, {x, y, z}]

$\{\{x \to 8, y \to 2, z \to 1\}\}$

**71** Solve[{6 x - y - z == 81, 4 (x - y) + z == 9, x - 2 (x + 2 y - z) == 9 }, {x, y, z}]

$\{\{x \to -63, y \to -144, z \to -315\}\}$

**72** Solve[{6 x - 6 y + 6 z == 12, 3 x - 3 y - 3 z == 9, 81 x + 81 y - 81 z == 162 }, {x, y, z}]

$\{\{x \to 2, y \to -\frac{1}{2}, z \to -\frac{1}{2}\}\}$

**73** Solve[{-x - 5 y + z == 0, z + 2 y == 1, y + z == 0 }, {x, y, z}]

$\{\{x \to -6, y \to 1, z \to -1\}\}$

**74** Solve[{-42 x - 21 y - 42 z == 21, (x + y) / z == 21, 7 x - y + 2 z == 21 }, {x, y, z}]

$\{\{x \to \frac{16}{7}, y \to -\frac{37}{7}, z \to -\frac{1}{7}\}\}$

**75** Solve[{-4 x + 8 y + 4 z == 81, -9 x - 9 y + 18 z == 2, 720 x + 1152 y - 1584 z == 2 }, {x, y, z}]

{ }

**Mit mehreren Variablen**

**76** Solve[{x + y + z == 100, x / y / z == 12 / 6 / 2 }, {x, y, z}]

$$\left\{\left\{x \to \frac{100\,z - z^2}{1 + z}\,,\ y \to \frac{100 - z}{1 + z}\right\}\right\}$$

**77** Solve[{x + y == 8, y + z == 14, z + n == 22, n - x == 10 }, {x, y, z}]

{ }

**78** Solve$\left[\left\{\frac{1}{x + y} == 6 / 5,\ 1 / (x + z) == 8 / 6,\ 1 / (y + z) == 12 / 7\right\}, \{x, y, z\}\right]$

$$\left\{\left\{x \to \frac{1}{2}\,,\ y \to \frac{1}{3}\,,\ z \to \frac{1}{4}\right\}\right\}$$

**79** Solve[
   {1 + u + 2 v + 3 w == x, x == u + v - w, -w + 2 u == u - v + x, u + 2 v == w, 1 - w == 2 }, {u, v, w, x}]

{{u → -7, v → 3, w → -1, x → -3}}

**80** Solve[{10 a / b + c == 5, 2 / 45 a + 1 / 5 c == 2 / 45, (a + b + c) / 6 == 1 }, {a, b, c}]

$$\left\{\left\{a \to \frac{1}{28}\left(-1007 - 9\sqrt{14065}\right),\ c \to \frac{1}{7}\left(\frac{115}{2} + \frac{\sqrt{14065}}{2}\right),\ b \to \frac{1}{4}\left(135 + \sqrt{14065}\right)\right\},\right.$$
$$\left.\left\{a \to \frac{1}{28}\left(-1007 + 9\sqrt{14065}\right),\ c \to \frac{1}{14}\left(115 - \sqrt{14065}\right),\ b \to \frac{1}{4}\left(135 - \sqrt{14065}\right)\right\}\right\}$$

**81** Solve[{10 a + y + v == -1, b + y + 3 v == 0, a - 21 == b + v, b - v == y }, {a, b, v, y}]

{{a → 21, b → -211, v → 211, y → -422}}

**82** Solve[{3 a + 2 b - c + 8 d - e == -22, -4 a + 9 b + c / 2 + d / 2 + e == 16, a + 8 b - 4 c - d + e / 4 == -5,
    -2 a + b + 9 c - d - e == 12, 10 a + 11 b - c - 11 d + 4 e == -4 }, {a, b, c, d, e}]

{{a → -3, b → 0, c → 1, d → -1, e → 4}}

**83** Solve$\left[\left\{\frac{y + \frac{x}{4} + 3}{4} + 1 == x,\ \frac{1}{\frac{4}{3y} + \frac{2}{3x}} == x - y\right\}, \{x, y\}\right]$

$$\left\{\left\{x \to \frac{4}{49}\left(20 - \sqrt{57}\right),\ y \to \frac{1}{49}\left(-43 - 15\sqrt{57}\right)\right\},\ \left\{x \to \frac{4}{49}\left(20 + \sqrt{57}\right),\ y \to \frac{1}{49}\left(-43 + 15\sqrt{57}\right)\right\}\right\}$$

**84** Solve[
    $\left\{\frac{\frac{a - 2c}{8} + 11}{e} == 2,\ \frac{e - 2a}{3} - c\,\frac{2b + a}{8} == 0,\ a / 2 + 6 c + e == 3,\ a + b - 12 c - e == 17\right\}, \{a, b, c, e\}\right]$

$$\left\{\{b \to 5,\ e \to 6,\ a \to 6,\ c \to -1\},\ \left\{b \to \frac{17135}{333}\,,\ e \to \frac{4328}{999}\,,\ a \to -\frac{16378}{999}\,,\ c \to \frac{127}{111}\right\}\right\}$$