

sistemi di equazioni di secondo grado intere

1	$\begin{cases} 2x - y = 9 \\ x^2 - y^2 = 24 \end{cases}$	$(5; 1) \quad (7; 5)$
2	$\begin{cases} x^2 + y^2 + 2(x + y) = 2 \\ 3x - y = 0 \end{cases}$	$(-1; -3) \quad \left(\frac{1}{5}; \frac{3}{5}\right)$
3	$\begin{cases} x + 2y = -1 \\ (x - y)^2 + 3xy = 7 \end{cases}$	$(3; -2) \quad (-3; 1)$
4	$\begin{cases} y - x = 1 \\ (x + 1)^2 + 1 = 2y^2 - 3x^2 \end{cases}$	$(0; 1) \quad (1; 2)$
5	$\begin{cases} x - y + 2 = 0 \\ x - y^2 - 1 = 0 \end{cases}$	<i>indeterminato</i>
6	$\begin{cases} y^2 - 4x(x + y - 5) = 8 \\ 2x + y = 8 \end{cases}$	$(2; 4) \quad \left(\frac{7}{2}; 1\right)$
7	$\begin{cases} x + y = 2 \\ (x - y)^2 = (x + 4) \cdot (y - 1) \end{cases}$	$(0; 2) \quad (1; 1)$
8	$\begin{cases} x + 2y = 3 \\ (x + y)^2 - 2y = x(x + 1) \end{cases}$	$(1; 1)$
9	$\begin{cases} y^2 - 7x + 12 = 0 \\ x - 7y = 3(3 - 2y) - 9 \end{cases}$	$(3; 3) \quad (4; 4)$
10	$\begin{cases} 2(1 - x) - 3y = 0 \\ y(2x + 5y) = \frac{4}{3} - (2x - y)^2 \end{cases}$	$\left(\frac{1}{3}; \frac{4}{9}\right) \quad \left(\frac{1}{2}; \frac{1}{3}\right)$
11	$\begin{cases} 3x - 2y = -1 \\ 3x^2 + y^2 - 2y = 3 \end{cases}$	$\left(-\frac{5}{7}; -\frac{4}{7}\right) \quad (1; 2)$

12	$\begin{cases} 2(x+1) = y(3x-y-1) \\ \frac{(y+1)(y-1)}{2} + x = \frac{y(y+1)}{2} \end{cases}$	$(2; 3) \quad \left(-\frac{1}{2}; -2\right)$
13	$\begin{cases} 3(y+1) = 2(x+y) - x \\ 5(x-1)^2 - 3(1-3x) = x(y+2) + y(1-x) \end{cases}$	<i>indeterminato</i>
14	$\begin{cases} x - 2y = \frac{1-3y}{2} \\ 1 - 2y(x+1) = (x-y)^2 - 3x \end{cases}$	$\left(-\frac{2}{5}; -\frac{9}{5}\right) \quad (1,1)$
15	$\begin{cases} x - 3y^2 = 1 \\ 2(3x+y) + 2(2y+1) = 12(x-1) - 3y - 1 \end{cases}$	$\left(\frac{7}{4}; -\frac{1}{2}\right) \quad (4,1)$
16	$\begin{cases} x - 2y = 2 \\ (x+1)^2 + 2y^2 - \frac{1}{3}x = -\frac{2}{3}(1+y) \cdot (1-y) \end{cases}$	<i>indeterminato</i>
17	$\begin{cases} x - y = 3(1-x) \\ (x+y-2)^2 - 2 = 4(1-x) + 2y(x-2) \end{cases}$	$(1; 1) \quad \left(\frac{7}{17}; -\frac{23}{17}\right)$
18	$\begin{cases} 5x + y^2 = \sqrt{5}(3y - \sqrt{5}) \\ \sqrt{5}x - y = 0 \end{cases}$	$(1; \sqrt{5})$
19	$\begin{cases} x - 3(y + \sqrt{2}) = 1 - y^2 \\ x - \sqrt{2}y = 1 \end{cases}$	$(-1; -\sqrt{2}) \quad (3\sqrt{2} + 1; 3)$
20	$\begin{cases} \frac{x^2}{\sqrt{2}-1} + \frac{y^2}{\sqrt{2}+1} = x + y \\ x - y + 2 = 0 \end{cases}$	$(\sqrt{2}-1; \sqrt{2}+1) \\ \left(\frac{\sqrt{2}-2}{2}; \frac{\sqrt{2}+2}{2}\right)$
21	$\begin{cases} (y+2)(y-2) + (x+\sqrt{2})^2 = 7\sqrt{2}x - 3y \\ \sqrt{2}x - y = 0 \end{cases}$	$\left(-\frac{\sqrt{2}}{3}; -\frac{2}{3}\right) \quad (\sqrt{2}; 2)$

22	$\begin{cases} \frac{x+2y}{x-1} = 2 \\ 4(x-y)^2 = 22+x \end{cases}$	$(3; \frac{1}{2}) \quad (-6; -4)$
23	$\begin{cases} 2x - 2y = 3 \\ \frac{3}{x-1} - \frac{3}{2-x} = \frac{8}{y} \end{cases}$	$(\frac{1}{2}; -1) \quad (\frac{5}{2}; 1)$
24	$\begin{cases} 3x - y = 2 \\ \frac{3}{x-1} = \frac{1+2y-4}{1-y} \end{cases}$	$(-\frac{1}{3}; -3)$
25	$\begin{cases} \frac{x^2 - 3x + 2}{x-y} = y + 2 \\ \frac{2x + 3y}{x + 5y + 5} = 1 \end{cases}$	$(1; -2) \quad (\frac{13}{3}; -\frac{1}{3})$
26	$\begin{cases} \frac{1}{x+y} + \frac{x+y}{2} = \frac{3}{2} \\ \frac{1}{x} + \frac{1}{y} = \frac{1}{xy} \end{cases}$	<i>indeterminato</i>
27	$\begin{cases} \frac{3}{x-1} = 1 + \frac{5x+2y-4}{1-y} \\ 3x - y = 2 \end{cases}$	$(-\frac{1}{2}; -\frac{7}{2})$
28	$\begin{cases} \frac{1}{y} - \frac{1}{x} = \frac{2}{xy} \\ \frac{x}{y^2 + y + 4} = \frac{2}{x+1} \end{cases}$	$(3; 1) \quad (4; 2)$
29	$\begin{cases} \frac{1}{x+y} + \frac{x+y}{2} = \frac{3}{2} \\ \frac{1}{x} + \frac{1}{y} = \frac{1}{xy} \end{cases}$	<i>indeterminato</i>
30	$\begin{cases} x^2 - y = 3 \\ \frac{x-1}{y-1} = \frac{2}{3} \end{cases}$	$(1; -2) \quad (\frac{5}{2}; \frac{13}{4})$

31	$\begin{cases} \frac{x+y}{2} = \frac{1}{x} \\ \frac{x+y}{x-y} = \frac{1}{3} \end{cases}$	$(-2; 1) \quad (2; -1)$
32	$\begin{cases} x+y = 5 \\ \frac{1}{4}x = \frac{y-1}{x-4} \end{cases}$	$(-4; 9)$
33	$\begin{cases} x-y = 4 \\ \frac{3x-2}{y+5} + \frac{y}{x} = 2 \end{cases}$	$\left(-\frac{1}{2}; -\frac{9}{2}\right) \quad (4; 0)$
34	$\begin{cases} \frac{x^2-x}{y} = 4-x \\ \frac{x+2y}{x-y} = 4 \end{cases}$	$(2; 1)$
35	$\begin{cases} \frac{x+y}{x-y} = 2 \\ \frac{x^2}{x^2+xy} = \frac{3}{4} \end{cases}$	<i>indeterminato</i>
36	$\begin{cases} \frac{1}{x} + \frac{2}{y} - \frac{x+y}{xy} = 1 \\ \frac{(x-2)^2 + y}{(y-1)^2 + x} = \frac{13}{2} \end{cases}$	$\left(\frac{1}{2}; 1\right) \quad (10; 1)$
37	$\begin{cases} 1 + \frac{xy}{x+2y} = -\frac{2}{x+2y} \\ \frac{7}{2}x - \frac{10}{3}y = \frac{1}{2} \end{cases}$	$\left(-2; -\frac{9}{4}\right) \quad \left(-\frac{17}{21}; -1\right)$
38	$\begin{cases} \frac{x^2-y^2}{xy} = -\frac{8}{3} \\ \frac{x+y}{x-2y} = 0,4 \end{cases}$	<i>indeterminato</i>

39	$\begin{cases} \frac{x}{x+y} + \frac{y}{x+2y} = \frac{9}{x^2 + 3xy + 2y^2} \\ (x-2)^2 - (y-1)^2 = (x+y)(x-y) - 3 \end{cases}$	$(0; -3) \quad \left(\frac{21}{11}; \frac{9}{11}\right)$
40	$\begin{cases} x(1+x) - 4 = x^2 - 4 - y \\ \frac{5x(5y+3)}{3(5x-3)} = 1 \end{cases}$	$\left(-\frac{3}{5}; \frac{3}{5}\right)$
41	$\begin{cases} \frac{1}{x+y} + \frac{x+y}{2} = \frac{3}{2} \\ \frac{1}{x} + \frac{1}{y} = \frac{1}{xy} \end{cases}$	<i>indeterminato</i>
42	$\begin{cases} \left(\frac{1}{x+y} - 1\right)(x-y+1) = 0 \\ (x-2)(x+y-4) = 0 \end{cases}$	$(2; -1) \quad (2; 3) \quad \left(\frac{3}{2}; \frac{5}{2}\right)$
43	$\begin{cases} 2(x-1) = 3(3-y) - x \\ \frac{x(y+2)}{x+1} = 2 \end{cases}$	$\left(\frac{2}{3}; 3\right) \quad \left(3; \frac{2}{3}\right)$
44	$\begin{cases} \frac{6x(x-1)+7}{x^2+y} = 6 \\ \frac{3x-y}{1+y} = -\frac{y-1}{y} \end{cases}$	$\left(\frac{1}{2}; \frac{2}{3}\right) \quad \left(\frac{2}{3}; \frac{1}{2}\right)$
45	$\begin{cases} x+y = 7 \\ \frac{1}{x} + \frac{1}{y} = -\frac{7}{30} \end{cases}$	$(-3; 10) \quad (10; -3)$
46	$\begin{cases} 4(1-x-y) - x^2 = y - x(x-1) \\ \frac{y^2 + 4xy}{y^2 - xy - 1} = 1 \end{cases}$	$\left(1; -\frac{1}{5}\right) \quad \left(-\frac{1}{5}; 1\right)$
47	$\begin{cases} \frac{1}{x} + \frac{1}{y} = 5 \\ 6xy = 1 \end{cases}$	$\left(\frac{1}{2}; \frac{1}{3}\right) \quad \left(\frac{1}{3}; \frac{1}{2}\right)$

48	$\begin{cases} \frac{4}{y+2} - \frac{4-x}{2} = 2 \\ \frac{x-4}{2} - \frac{y+2}{4} = 0 \end{cases}$	(6; 2)
49	$\begin{cases} \frac{x+2}{2} - \frac{3-y}{3} = 0 \\ \frac{x-3}{y+2} + \frac{y-2}{x+3} = 0 \end{cases}$	(-2; 3) (2; -3)
50	$\begin{cases} \frac{3}{x-1} + \frac{3}{y-1} + 2 = 0 \\ y - x = 3(1 - x) \end{cases}$	$(\frac{1}{4}; \frac{5}{2})$
51	$\begin{cases} x + y + \frac{3}{2} = \frac{3-y}{2} \\ \frac{y(x-1)}{y+1} + y = 2(x-2) \end{cases}$	$(\frac{6}{5}; -\frac{4}{5})$ (3; -2)
52	$\begin{cases} \frac{3}{x-2} - \frac{y-2}{y-1} + 3 = 0 \\ 2(\frac{1}{2}x - y) + 3 = 0 \end{cases}$	$(-\frac{5}{2}; \frac{1}{4})$ (1; 2)
53	$\begin{cases} \frac{1}{y-3x} = 1 \\ \frac{3x+1}{y} = 5 - \frac{y}{x} \end{cases}$	(1; 4)
54	$\begin{cases} \frac{y(y-1)}{x} + y = 4 \\ \frac{2x+y}{y-x} = 4 \end{cases}$	(1; 2)
55	$\begin{cases} \frac{x-y+3}{x-y} + \frac{x+2y+6}{x+y} = 2 \\ 2x + y = 21 \end{cases}$	(6; 9) (14; -7)

56	$\begin{cases} \frac{y+4}{x+1} = 1 \\ \frac{2}{3}x + y = \frac{1}{x-y} \end{cases}$	(2; -1)
57	$\begin{cases} \frac{(y+2)(y-2)}{y} = y-x \\ \frac{xy+2}{2x+y} + 1 = 0 \end{cases}$	(-2; -2) (-1; -4)
58	$\begin{cases} 3x - 2y = 4 \\ \frac{x+y}{x+1} + \frac{x-y}{x-1} = \frac{x^2+2y^2}{x^2-1} \end{cases}$	$(\frac{4}{7}; -\frac{8}{7})$ (2; 1)
59	$\begin{cases} \frac{1}{xy+y} + \frac{y}{x^2+x} = \frac{2}{3xy} \\ \frac{x+7}{y+1} = 3 \end{cases}$	(-10; -2)
60	$\begin{cases} \frac{x^2+y^2}{x^2+y^2-2xy} = 1 \\ x-y+\sqrt{2} = 0 \end{cases}$	$(-\sqrt{2}; 0)$ $(0; \sqrt{2})$
61	$\begin{cases} x+y = \sqrt{2} + 3 \\ \frac{\sqrt{2}}{x} + \frac{\sqrt{2}}{y} = \frac{1}{3}\sqrt{2} + 1 \end{cases}$	$(\sqrt{2}; 3)$ $(3; \sqrt{2})$
62	$\begin{cases} \frac{1}{x} + \frac{1}{y} + \frac{1}{xy} = 11 \\ 6x + 6y = 5 \end{cases}$	$(\frac{1}{2}; \frac{1}{3})$ $(\frac{1}{3}; \frac{1}{2})$
63	$\begin{cases} \frac{x+y}{xy-1} = \frac{2}{x+y-3} \\ (x-y)(2x-2y+1) = 2(12-2xy-y) \end{cases}$	(3; 1) (1; 3)
64	$\begin{cases} 2 - \frac{7}{xy} = \frac{xy-1}{6} \\ x+y = 5 \end{cases}$	(2; 3) (3; 2)

65	$\begin{cases} \frac{11}{xy} - \frac{1}{x} - \frac{1}{y} = 1 \\ x(1-y) = \frac{30}{xy} \end{cases}$	(2; 3) (3; 2) (1; 5) (5; 1)
66	$\begin{cases} \frac{3(2-y-x^2)+1}{1-x} = 3x \\ \frac{9(x+2)(x-2)}{(1+3y)(1-3y)} = 1 \end{cases}$	$(\frac{1}{3}; 2)$ $(2; \frac{1}{3})$
67	$\begin{cases} x+y=8 \\ \frac{x^2+y^2}{xy} + 1 = \frac{312}{x} \left(\frac{1}{2y} - \frac{1}{3y} \right) \end{cases}$	(2; 6) (6; 2)
68	$\begin{cases} 3(y+1) + x(y+3) = 0 \\ \frac{(3x+5)(y+1)}{x+4} = -2 \end{cases}$	(3; -2) (-2; 3)
69	$\begin{cases} x(1-x) + y(1+2x) = 3 - x^2 \\ \frac{8x(2-3y)+3}{1-y} = 16 \end{cases}$	$(\frac{5}{4}; \frac{1}{2})$ $(\frac{1}{2}; \frac{5}{4})$
70	$\begin{cases} x+y=9 \\ \frac{x^2+xy+y^2}{x^2-xy+y^2} = \frac{67}{39} \end{cases}$	(7; 2) (2; 7)
71	$\begin{cases} \frac{xy+y}{x} = x - \frac{1}{x} \\ y(xy-y) = 0 \end{cases}$	(-1; 0) (0; -1)
sistemi simmetrici		
72	$\begin{cases} x+y=1 \\ xy=-6 \end{cases}$	(-2; 3) (3; -2)
73	$\begin{cases} x+y=0 \\ xy=1 \end{cases}$	<i>impossibile</i>

74	$\begin{cases} x + y = -\frac{9}{10} \\ xy = \frac{1}{5} \end{cases}$	$\left(-\frac{2}{5}; -\frac{1}{2}\right) \left(-\frac{1}{2}; -\frac{2}{5}\right)$
75	$\begin{cases} x + y = -\frac{23}{8} \\ xy = -\frac{9}{2} \end{cases}$	$\left(-4; \frac{9}{8}\right) \left(\frac{9}{8}; -4\right)$
76	$\begin{cases} x + y = \frac{14}{9} \\ xy = \frac{40}{81} \end{cases}$	$\left(\frac{10}{9}; \frac{4}{9}\right) \left(\frac{4}{9}; \frac{10}{9}\right)$
77	$\begin{cases} x + y = \frac{1}{3} \\ x^2 + y^2 = \frac{65}{18} \end{cases}$	$\left(-\frac{7}{6}; \frac{3}{2}\right) \left(\frac{3}{2}; -\frac{7}{6}\right)$
78	$\begin{cases} x + y = \frac{20}{3} \\ x^2 - xy + y^2 = \frac{175}{9} \end{cases}$	$\left(5; \frac{5}{3}\right) \left(\frac{5}{3}; 5\right)$
79	$\begin{cases} x^2 + y^2 = \frac{1}{81} + 3xy \\ 4x + 4y = -\frac{16}{9} \end{cases}$	$\left(-\frac{1}{3}; -\frac{1}{9}\right) \left(-\frac{1}{9}; -\frac{1}{3}\right)$
80	$\begin{cases} x^2 + y^2 = 164 \\ xy = -80 \end{cases}$	$(-8; 10) (10; -8)$ $(8; -10) (-10; 8)$
81	$\begin{cases} x^2 + y^2 = \frac{181}{49} \\ xy = -\frac{90}{49} \end{cases}$	$\left(\frac{9}{7}; -\frac{10}{7}\right) \left(-\frac{10}{7}; \frac{9}{7}\right)$ $\left(-\frac{9}{7}; \frac{10}{7}\right) \left(\frac{10}{7}; -\frac{9}{7}\right)$
82	$\begin{cases} x + y + 21b = 1 \\ xy + 90 = 189b \end{cases}$	$(10 - 21b; -9)$ $(-9; 10 - 21b)$

83	$\begin{cases} 9x + 9y = 13b + 45 \\ 3xy = 35b - \frac{56b^2}{9} \end{cases}$	$\left(5 - \frac{8b}{9}; \frac{7b}{3}\right)$ $\left(\frac{7b}{3}; 5 - \frac{8b}{9}\right)$
84	$\begin{cases} x + y = \frac{2b}{3} \\ x^2 + y^2 = \frac{10b^2}{9} \end{cases}$	$\left(-\frac{b}{3}; b\right)$ $\left(b; -\frac{b}{3}\right)$
85	$\begin{cases} 10b^2 + xy = 17b + 48 \\ x + 19 = 3b - y \end{cases}$	$(-3 - 2b; 5b - 16)$ $(5b - 16; -3 - 2b)$
86	$\begin{cases} x - 18 = 10b - y \\ xy - 56 = b(21b + 110) \end{cases}$	$(3b + 14; 7b + 4)$ $(7b + 4; 3b + 14)$
87	$\begin{cases} x - \frac{29b}{7} + y = 0 \\ \frac{x^2 + y^2}{5} = \frac{101b^2}{49} \end{cases}$	$\left(3b; \frac{8b}{7}\right)$ $\left(\frac{8b}{7}; 3b\right)$
88	$\begin{cases} x + y + b = 0 \\ x^2 + y^2 = 5b^2 \end{cases}$	$(b; -2b)$ $(-2b; b)$
89	$\begin{cases} x + y + 5 = 8b \\ 7b^2 - xy = 41b + 6 \end{cases}$	$(7b + 1; b - 6)$ $(b - 6; 7b + 1)$
90	$\begin{cases} 3xy + 36b^2 = 18b \\ \frac{y}{2}(1 + x) + 6b^2 = 5b + \frac{1 - x}{2} \end{cases}$	$(1 - 2b; 6b)$ $(6b; 1 - 2b)$
91	$\begin{cases} x + y + \frac{b}{3} = 1 \\ x^2 + y^2 - 1 = \frac{b^2 - 3xy - b}{9} \end{cases}$	$\left(1; -\frac{b}{3}\right)$ $\left(-\frac{b}{3}; 1\right)$

sistemi simmetrici di terzo grado

92	$\begin{cases} x + y = -\frac{5}{2} \\ x^3 + y^3 = -\frac{35}{8} \end{cases}$	$(-1; -\frac{3}{2})$ $(-\frac{3}{2}; -1)$
93	$\begin{cases} x + y = -1 \\ x^3 + y^3 = -\frac{1}{3} \end{cases}$	$(-\frac{2}{3}; -\frac{1}{3})$ $(-\frac{1}{3}; -\frac{2}{3})$
94	$\begin{cases} x + y = -2 \\ x^3 + y^3 = -\frac{31}{2} \end{cases}$	$(-\frac{5}{2}; \frac{1}{2})$ $(\frac{1}{2}; -\frac{5}{2})$
95	$\begin{cases} x + y = 2\sqrt{7} - 1 \\ x^3 + y^3 = 17\sqrt{7} - 22 \end{cases}$	$(\sqrt{7}; \sqrt{7} - 1)$ $(\sqrt{7} - 1; \sqrt{7})$
96	$\begin{cases} x + y = 3\sqrt{6} \\ x^3 + y^3 = 54\sqrt{6} \end{cases}$	$(\sqrt{6}; 2\sqrt{6})$ $(2\sqrt{6}; \sqrt{6})$
97	$\begin{cases} x + y = \frac{b}{4} \\ x^3 + y^3 = \frac{127b^3}{64} \end{cases}$	Se $b \neq 0$ $(\frac{7b}{4}; -\frac{3b}{2})$ $(-\frac{3b}{2}; \frac{7b}{4})$ Se $b = 0$ infinite soluzioni del tipo $(x; -x)$
98	$\begin{cases} x + y = -\frac{10b}{3} \\ x^3 + y^3 = -\frac{250b^3}{27} \end{cases}$	Se $b \neq 0$ $(-\frac{5b}{3}; -\frac{5b}{3})$ Se $b = 0$ infinite soluzioni del tipo $(x; -x)$
99	$\begin{cases} x + y = b \\ x^3 + y^3 = \frac{67b^3}{25} \end{cases}$	Se $b \neq 0$ $(\frac{7b}{5}; -\frac{2b}{5})$ $(-\frac{2b}{5}; \frac{7b}{5})$ Se $b = 0$ infinite soluzioni del tipo $(x; -x)$

100	$\begin{cases} x + y = -\frac{b}{12} \\ x^3 + y^3 = -\frac{37b^3}{1728} \end{cases}$	<p>Se $b \neq 0$</p> $\begin{pmatrix} -\frac{b}{3}; & \frac{b}{4} \\ \frac{b}{4}; & -\frac{b}{3} \end{pmatrix}$ <p>Se $b = 0$ infinite soluzioni del tipo $(x; -x)$</p>
101	$\begin{cases} x + y = 4b - 6 \\ \frac{x^3 + y^3}{4b - 6} = 31b^2 + 42b + 36 \end{cases}$	<p>C.E. $b \neq \frac{3}{2}$</p> $\begin{pmatrix} 5b; & -b - 6 \\ -b - 6; & 5b \end{pmatrix}$
sistemi omogenei con ∞^1 soluzioni		
102	$\begin{cases} 3y^2 + x^2 = 4xy \\ 3y^2 = xy \end{cases}$	soluzioni del tipo $(x; \frac{x}{3})$
103	$\begin{cases} 3y^2 + 20xy = 128x^2 \\ 3y^2 + 32xy = 0 \end{cases}$	soluzioni del tipo $(x; -\frac{32x}{3})$
104	$\begin{cases} 45y^2 + 14x^2 = 53xy \\ 36y^2 + 17xy = 35x^2 \end{cases}$	soluzioni del tipo $(x; \frac{7x}{9})$
105	$\begin{cases} 15y^2 = 2x^2 + 7xy \\ 10y^2 + 5x^2 = -27xy \end{cases}$	soluzioni del tipo $(x; -\frac{x}{5})$
106	$\begin{cases} 7y^2 + 8x^2 = -15xy \\ y^2 + xy = 0 \end{cases}$	soluzioni del tipo $(x; -x)$
107	$\begin{cases} 30y^2 = 20x^2 + xy \\ 36y^2 + 35x^2 = 72xy \end{cases}$	soluzioni del tipo $(x; \frac{5x}{6})$
108	$\begin{cases} 49y^2 = 63xy + 10x^2 \\ 21y^2 = 23xy + 10x^2 \end{cases}$	soluzioni del tipo $(x; \frac{10x}{7})$
109	$\begin{cases} y^2 + 6x^2 = 3\sqrt{3}xy \\ y^2 - 6x^2 = -\sqrt{3}xy \end{cases}$	soluzioni del tipo $(x; \sqrt{3}x)$

110	$\begin{cases} 28y^2 + 39xy + 5x^2 = 0 \\ 12y^2 = 13xy + 35x^2 \end{cases}$	soluzioni del tipo $(x; -\frac{5x}{4})$
111	$\begin{cases} 4y^2 + 5\sqrt{13}xy = 117x^2 \\ 28y^2 + 468x^2 = -79\sqrt{13}xy \end{cases}$	soluzioni del tipo $(x; -\frac{9\sqrt{13}x}{4})$
sistemi di vario tipo		
112	$\begin{cases} 9y^2 + 12xy + 4x^2 = 9 \\ 4y^2 + 33xy + 8x^2 = 0 \end{cases}$	$(\frac{12}{5}; -\frac{3}{5})$ $(-\frac{12}{5}; \frac{3}{5})$ $(\frac{3}{22}; -\frac{12}{11})$ $(-\frac{3}{22}; \frac{12}{11})$
113	$\begin{cases} 2y^2 + 2xy + 3x^2 = 3 \\ 2y^2 + 3xy - 2x^2 = 0 \end{cases}$	$(\frac{\sqrt{21}}{7}; -\frac{2\sqrt{21}}{7})$ $(-\frac{\sqrt{21}}{7}; \frac{2\sqrt{21}}{7})$ $(\frac{\sqrt{6}}{3}; \frac{\sqrt{6}}{6})$ $(-\frac{\sqrt{6}}{3}; -\frac{\sqrt{6}}{6})$
114	$\begin{cases} x^2 + y^2 = 1 \\ 6y^2 + 21x^2 = 23xy \end{cases}$	$(\frac{3\sqrt{58}}{58}; \frac{7\sqrt{58}}{58})$ $(-\frac{3\sqrt{58}}{58}; -\frac{7\sqrt{58}}{58})$ $(\frac{2\sqrt{13}}{13}; \frac{3\sqrt{13}}{13})$ $(-\frac{2\sqrt{13}}{13}; -\frac{3\sqrt{13}}{13})$
115	$\begin{cases} y^2 + 2xy = 3 \\ 4y^2 + 31xy = 8x^2 \end{cases}$	$(\frac{1}{4}; -2)$ $(-\frac{1}{4}; 2)$ $(\frac{4\sqrt{3}}{3}; \frac{\sqrt{3}}{3})$ $(-\frac{4\sqrt{3}}{3}; -\frac{\sqrt{3}}{3})$
116	$\begin{cases} 7y^2 + 6xy + 24x^2 = 8 \\ 3y^2 + 2xy - 8x^2 = 0 \end{cases}$	$(\frac{\sqrt{5}}{5}; -\frac{2\sqrt{5}}{5})$ $(-\frac{\sqrt{5}}{5}; \frac{2\sqrt{5}}{5})$ $(\frac{3\sqrt{2}}{10}; \frac{2\sqrt{2}}{5})$ $(-\frac{3\sqrt{2}}{10}; -\frac{2\sqrt{2}}{5})$
117	$\begin{cases} y^2 + xy = 0 \\ 18y^2 + 5x^2 + 40xy = 20 \end{cases}$	$(2; 0)$ $(-2; 0)$

118	$\begin{cases} 8y^2 + 5xy + 5x^2 = 10 \\ 5y^2 + 3xy = 0 \end{cases}$	$(\sqrt{2}; 0) \quad (-\sqrt{2}; 0)$ $\left(\frac{5\sqrt{305}}{61}; -\frac{3\sqrt{305}}{61}\right) \quad \left(-\frac{5\sqrt{305}}{61}; \frac{3\sqrt{305}}{61}\right)$
119	$\begin{cases} 8y^2 + 27xy + 6x^2 = 6 \\ 9y^2 - 12xy + 4x^2 = 0 \end{cases}$	$\left(\frac{3\sqrt{93}}{62}; \frac{3\sqrt{31}}{31}\right) \quad \left(-\frac{3\sqrt{93}}{62}; -\frac{3\sqrt{31}}{31}\right)$
120	$\begin{cases} y^2 + 6xy + 2x^2 = 1 \\ 32y^2 + 68xy + 35x^2 = 0 \end{cases} \quad \left(\pm \frac{\sqrt{15}}{15}; \pm \frac{3\sqrt{15}}{15}\right)$	<i>impossibile</i>
121	$\begin{cases} y^2 + 10xy + 6x^2 = 3 \\ 4y^2 - 15xy + 9x^2 = 0 \end{cases}$	$\left(\frac{4\sqrt{3}}{15}; \frac{\sqrt{3}}{5}\right) \quad \left(-\frac{4\sqrt{3}}{15}; -\frac{\sqrt{3}}{5}\right)$ $\left(\frac{\sqrt{15}}{15}; \frac{3\sqrt{15}}{15}\right) \quad \left(-\frac{\sqrt{15}}{15}; -\frac{3\sqrt{15}}{15}\right)$
122	$\begin{cases} 9y^2 + 10xy + 2x^2 = 6 \\ 36y^2 + 40xy + 17x^2 = 27 \end{cases}$	$\left(\frac{\sqrt{3}}{3}; -\frac{2\sqrt{3}}{3}\right) \quad \left(-\frac{\sqrt{3}}{3}; \frac{2\sqrt{3}}{3}\right)$ $\left(\frac{\sqrt{3}}{3}; \frac{8\sqrt{3}}{27}\right) \quad \left(-\frac{\sqrt{3}}{3}; -\frac{8\sqrt{3}}{27}\right)$
123	$\begin{cases} 8y^2 + 20xy + 5x^2 = 20 \\ 33y^2 + 71xy + x^2 = 100 \end{cases}$	$\left(\frac{2\sqrt{85}}{17}; -\frac{6\sqrt{85}}{17}\right) \quad \left(-\frac{2\sqrt{85}}{17}; \frac{6\sqrt{85}}{17}\right)$
124	$\begin{cases} y^2 + 5xy + x^2 = 1 \\ 3y^2 + 9xy - 26x^2 = 4 \end{cases}$	$(1; -5) \quad (-1; 5)$ $\left(\frac{\sqrt{7}}{7}; -\frac{6\sqrt{7}}{7}\right) \quad \left(-\frac{\sqrt{7}}{7}; \frac{6\sqrt{7}}{7}\right)$
125	$\begin{cases} 6y^2 + 24xy + 5x^2 = 30 \\ y^2 + 10xy + 3x^2 = 12 \end{cases}$	$\left(\frac{\sqrt{42}}{7}; \frac{\sqrt{42}}{7}\right) \quad \left(-\frac{\sqrt{42}}{7}; -\frac{\sqrt{42}}{7}\right)$
126	$\begin{cases} 10y^2 + 35xy + 21x^2 = 6 \\ 4y^2 + 12xy + 7x^2 = 2 \end{cases}$	$\left(1; -\frac{1}{2}\right) \quad \left(-1; \frac{1}{2}\right)$ $\left(\frac{\sqrt{14}}{7}; 0\right) \quad \left(-\frac{\sqrt{14}}{7}; 0\right)$

127	$\begin{cases} 9y^2 + 80xy + 12x^2 = 8 \\ y^2 + 11xy - 2x^2 = 4 \end{cases}$	<i>impossibile</i>
128	$\begin{cases} 6y^2 + 3xy + 4x^2 = 2 \\ 8y^2 - 6xy - x^2 = 4 \end{cases}$	$\left(\frac{\sqrt{26}}{13}; -\frac{3\sqrt{26}}{26}\right) \left(-\frac{\sqrt{26}}{13}; \frac{3\sqrt{26}}{26}\right)$
129	$\begin{cases} xy + 9x^2 = 3 \\ -y^2 - xy + 36x^2 = 12 \end{cases}$	$\left(\frac{\sqrt{3}}{3}; 0\right) \left(-\frac{\sqrt{3}}{3}; 0\right)$ $\left(\frac{\sqrt{3}}{2}; -\frac{5\sqrt{3}}{2}\right) \left(-\frac{\sqrt{3}}{2}; \frac{5\sqrt{3}}{2}\right)$
130	$\begin{cases} 108y^2 + 3xy + 4x^2 = 12 \\ 969y^2 + 23xy + 36x^2 = 108 \end{cases}$	$(\sqrt{3}; 0) (-\sqrt{3}; 0)$ $\left(\frac{1}{4}; -\frac{1}{3}\right) \left(-\frac{1}{4}; \frac{1}{3}\right)$
131	$\begin{cases} 163y^2 + 441xy + 19x^2 = 168 \\ 3x^2 + 64xy + 24y^2 = 24 \end{cases}$	<i>impossibile</i>