

risolvi le seguenti equazioni letterali intere

1	$6x + a = 4$	$x = \frac{4 - a}{6}$
2	$8x - 3b = 5b$	$x = b$
3	$5x + 9 = 13a$	$x = \frac{13a - 9}{5}$
4	$4(x + b) - 6(x - b) = 0$	$x = 5b$
5	$6(x + 3a) = 2(x + 5a)$	$x = -2a$
6	$5x + 2(4a - 3x) = 7a$	$x = a$
7	$2(2x + 3) = x + 5(x - 2a) + 4$	$x = 5a + 1$
8	$5(a + 3x) + 110a = 10(12a - 3)$	$x = \frac{a}{3} - 2$
9	$3(2x + 4) - 3(x - 2b) = 2(9b - x) + x$	$x = 3b - 3$
10	$15(x + a - 3) - 3(2a - 5) = 3(x + 2)$	$x = 3 - \frac{3a}{4}$

discuti e risolvi le seguenti equazioni letterali intere

11	$ax + a = 0$	se $a \neq 0$ $x = -1$ se $a = 0$ indeterminata
12	$a(x - 2) = a$	se $a \neq 0$ $x = 3$ se $a = 0$ indeterminata
13	$ax = 2ab$	se $a \neq 0$ $x = 2b$ se $a = 0$ indeterminata
14	$bx = 3b^2$	se $b \neq 0$ $x = 3b$ se $b = 0$ indeterminata

15	$a(2x + 4) = 6$	<p>se <math>a \neq 0</math> <math>x = \frac{3}{a} - 2</math>  se <math>a = 0</math> impossibile</p>
16	$(a + 2)x = 7$	<p>se <math>a \neq -2</math> <math>x = \frac{7}{a + 2}</math>  se <math>a = -2</math> impossibile</p>
17	$ax = 8$	<p>se <math>a \neq 0</math> <math>x = \frac{8}{a}</math>  se <math>a = 0</math> impossibile</p>
18	$ax = a^2$	<p>se <math>a \neq 0</math> <math>x = a</math>  se <math>a = 0</math> indeterminata</p>
19	$4m^2x = 4$	<p>se <math>m \neq 0</math> <math>x = \frac{1}{m^2}</math>  se <math>m = 0</math> impossibile</p>
20	$(a + 1)x = a$	<p>se <math>a \neq -1</math> <math>x = \frac{a}{a + 1}</math>  se <math>a = -1</math> impossibile</p>
21	$(a + 1)x = a^2 - 1$	<p>se <math>a \neq -1</math> <math>x = a - 1</math>  se <math>a = -1</math> indeterminata</p>
22	$(a - 3)x = a + 3$	<p>se <math>a \neq 3</math> <math>x = \frac{a + 3}{a - 3}</math>  se <math>a = 3</math> impossibile</p>
23	$(a + 1)x = a^3 + 1$	<p>se <math>a \neq -1</math> <math>x = a^2 - a + 1</math>  se <math>a = -1</math> indeterminata</p>
24	$(a - 3)x = a^2 - 9$	<p>se <math>a \neq 3</math> <math>x = a + 3</math>  se <math>a = 3</math> indeterminata</p>
25	$3(1 - b)x = b - 2$	<p>se <math>b \neq 1</math> <math>x = \frac{b - 2}{3(1 - b)}</math>  se <math>b = 1</math> impossibile</p>
26	$(a - 3)x = a^2 - 2a - 3$	<p>se <math>a \neq 3</math> <math>x = a + 1</math>  se <math>a = 3</math> indeterminata</p>
27	$(a - 2)x = 2(1 + a) - (a - 2)$	<p>se <math>a \neq 2</math> <math>x = \frac{4 + a}{a - 2}</math>  se <math>a = 2</math> impossibile</p>

28	$a(x + 2) - a = 2(a - x + 1)$	<p>se <math>a \neq -2</math> <math>x = 1</math>            se <math>a = -2</math> indeterminata</p>
29	$bx + 16 = b(x - 2)$	<p>se <math>b \neq -8</math> impossibile            se <math>b = -8</math> indeterminata</p>
30	$(b^2 - 3b)x = b(b^2 - 9)$	<p>se <math>b \neq 0 \wedge b \neq 3</math> <math>x = b + 3</math>            se <math>b = 0 \vee b = 3</math> indeterminata</p>
31	$a(a^3 + x) = a^2x + a^2$	<p>se <math>a \neq 0 \wedge a \neq 1</math> <math>x = a(a + 1)</math>            se <math>a = 0 \vee a = 1</math> indeterminata</p>
32	$(a^2 + 1)x = a - 1$	$x = \frac{a - 1}{a^2 + 1}$
33	$(a + 2)x = a^2 - 4$	<p>se <math>a \neq -2</math> <math>x = a - 2</math>            se <math>a = -2</math> indeterminata</p>
34	$(m - 2)(3m - 1)x = (m + 1)(1 - 3m)$	<p>se <math>m \neq 2 \vee m \neq \frac{1}{3}</math> <math>x = \frac{m + 1}{2 - m}</math>            se <math>m = 2</math> impossibile            se <math>m = \frac{1}{3}</math> indeterminata</p>
35	$ax = 0$	<p>se <math>a \neq 0</math> <math>x = 0</math>            se <math>a = 0</math> indeterminata</p>
36	$(a^2 - 1)x = a + 1$	<p>se <math>a \neq \pm 1</math> <math>x = \frac{1}{a - 1}</math>            se <math>a = -1</math> indeterminata            se <math>a = +1</math> impossibile</p>
37	$(m^2 - m - 2)x = m^2 + 4m + 3$	<p>se <math>m \neq 2 \vee m \neq -1</math> <math>x = \frac{m + 3}{m - 2}</math>            se <math>m = -1</math> indeterminata            se <math>m = 2</math> impossibile</p>
38	$(a^2 - 4)x = a^2 + 4a + 4$	<p>se <math>a \neq \pm 2</math> <math>x = \frac{a + 2}{a - 2}</math>            se <math>a = -2</math> indeterminata            se <math>a = +2</math> impossibile</p>

39	$(m^2 + 2m - 3)x = m + 3$	<p>se <math>m \neq 1 \vee m \neq -3</math> <math>x = \frac{1}{m-1}</math>            se <math>m = -3</math> indeterminata            se <math>m = 1</math> impossibile</p>
40	$(a^2 - 9)x = a^3 - 3a^2$	<p>se <math>a \neq \pm 3</math> <math>x = \frac{a^2}{a+3}</math>            se <math>a = -3</math> impossibile            se <math>a = 3</math> indeterminata</p>
41	$(a^2 + 1)x = a^2 - 1$	$x = \frac{a^2 - 1}{a^2 + 1}$
42	$(a - b)x = 3$	<p>se <math>a \neq b</math> <math>x = \frac{3}{a-b}</math>            se <math>a = b</math> impossibile</p>
43	$abx = b$	<p>se <math>a \neq b \wedge b \neq 0</math> <math>x = \frac{1}{a}</math>            se <math>a = 0 \wedge b \neq 0</math> impossibile            se <math>b = 0</math> indeterminata</p>
44	$(a + 1)x = b$	<p>se <math>a \neq -1</math> <math>x = \frac{b}{a+1}</math>            se <math>a = -1 \wedge b \neq 0</math> impossibile            se <math>a = -1 \wedge b = 0</math> indeterminata</p>
45	$ax = b + 1$	<p>se <math>a \neq 0</math> <math>x = \frac{b+1}{a}</math>            se <math>a = 0 \wedge b \neq -1</math> impossibile            se <math>a = 0 \wedge b = -1</math> indeterminata</p>
46	$(a + b)x = b - 1$	<p>se <math>a \neq -b</math> <math>x = \frac{b-1}{a+b}</math>            se <math>a = -b \wedge b \neq 1</math> impossibile            se <math>a = -b \wedge b = 1</math> indeterminata</p>
47	$(1 - a)x = b - 2$	<p>se <math>a \neq 1</math> <math>x = \frac{b-2}{1-a}</math>            se <math>a = 1 \wedge b \neq 2</math> impossibile            se <math>a = 1 \wedge b = 2</math> indeterminata</p>

48	$(a - b)x = a + b$	$\text{se } a \neq b \quad x = \frac{a + b}{a - b}$ $\text{se } a = b \wedge b \neq 0 \text{ impossibile}$ $\text{se } a = b = 0 \text{ indeterminata}$
49	$(a - 2b)x = 2b(a - 1)$	$\text{se } a \neq 2b \quad x = \frac{2b(a - 1)}{a - 2b}$ $\text{se } a = 2b \wedge b \neq 0 \wedge a \neq 1 \text{ impossibile}$ $\text{se } a = 2b \wedge b = \frac{1}{2} \text{ indeterminata}$ $\text{se } a = 2b \wedge b \neq \frac{1}{2} \text{ impossibile}$ $\text{se } a = 2b \wedge b = 0 \text{ indeterminata}$
50	$b(2b + a)x = b^2$	$\text{se } b \neq 0 \wedge a \neq -2b \quad x = \frac{b}{2b + a}$ $\text{se } b \neq 0 \wedge a = -2b \text{ impossibile}$ $\text{se } b = 0 \text{ indeterminata}$
51	$(a + b)^2 x = 2(a^2 - b^2)$	$\text{se } a \neq -b \quad x = \frac{2(a - b)}{a + b}$ $\text{se } a = -b \text{ indeterminata}$
52	$ax - 2(x + a) = 2(a - x)$	$\text{se } a \neq 0 \quad x = 4$ $\text{se } a = 0 \text{ indeterminata}$
53	$a(x + 1) = (2 - a)x$	$\text{se } a \neq 1 \quad x = \frac{a}{2(1 - a)}$ $\text{se } a = 1 \text{ impossibile}$
54	$a^2 x - 1 = a^2 - a - x$	$x = \frac{a^2 - a + 1}{a^2 + 1}$
55	$x^2 - a^2 - (x + a)^2 = 1$	$\text{se } a \neq 0 \quad x = -\frac{2a^2 + 1}{2a}$ $\text{se } a = 0 \text{ impossibile}$
56	$my + 4 = 2y + m^2$	$\text{se } m \neq 2 \quad y = m + 2$ $\text{se } m = 2 \text{ indeterminata}$

57	$b^2(x - 1) = 3(b + 2x) - bx$	<p>se <math>b \neq 2 \vee b \neq -3</math> <math>x = \frac{b}{b-2}</math>            se <math>b = -3</math> indeterminata            se <math>b = 2</math> impossibile</p>
58	$a(y + 2) + 2 = (a + 1)^2 + y$	<p><math>a \neq 1</math> <math>y = a + 1</math>            se <math>a = 1</math> indeterminata</p>
59	$a(y - a - 1) = 3a + 2(2 - y)$	<p>se <math>a \neq -2</math> <math>y = a + 2</math>            se <math>a = -2</math> indeterminata</p>
60	$bx + 7b = ax + 2b$	<p>se <math>a \neq b</math> <math>x = \frac{5b}{a-b}</math>            se <math>a = b \wedge b \neq 0</math> impossibile            se <math>a = b = 0</math> indeterminata</p>
61	$2(y - 3b) - y = -2(b + y)$	$y = \frac{4}{3}b$
62	$a(x - a - 1) - 2(x - 3) + 2bx(x - 1) = 3bx^2 - bx(2 + x)$	<p>se <math>a \neq 2</math> <math>x = a + 3</math>            se <math>a = 2</math> indeterminata</p>
63	$(2 - a)x = a - 2$	<p>se <math>a \neq 2</math> <math>x = -1</math>            se <math>a = 2</math> indeterminata</p>
64	$(a^2 - 9)x = a^2 + 2a - 3$	<p>se <math>a \neq \pm 3</math> <math>x = \frac{a-1}{a-3}</math>            se <math>a = 3</math> impossibile            se <math>a = -3</math> indeterminata</p>
65	$(a^2 + a - 2)x = a^2 - a - 6$	<p>se <math>a \neq 1 \vee a \neq -2</math> <math>x = \frac{a-3}{a-1}</math>            se <math>a = -2</math> indeterminata            se <math>a = 1</math> impossibile</p>
66	$(1 + a)x = b + 2$	<p>se <math>a \neq -1</math> <math>x = \frac{b+2}{a+1}</math>            se <math>a = -1 \wedge b = -2</math> indeterminata            se <math>a = -1 \wedge b \neq -2</math> impossibile</p>

67	$b(x - 4b) - a(x - 4a) = 0$	<p>se <math>a \neq b</math> <math>x = 4(a + b)</math>            se <math>a = b</math> indeterminata</p>
68	$(a - b + 2)x = b(b - x) + 2x - a^2$	<p>se <math>a \neq 0</math> <math>x = \frac{b^2 - a^2}{a}</math>            se <math>a = 0 \wedge b = 0</math> indeterminata            se <math>a = 0 \wedge b \neq 0</math> impossibile</p>
69	$abx \left( \frac{1}{2}a + 1 \right) = a^2$	<p>se <math>a \neq 0 \wedge a \neq -2 \wedge b \neq 0</math> <math>x = \frac{2a}{b(a + 2)}</math>            se <math>a = 0</math> indeterminata            se <math>a = -2</math> impossibile            se <math>a \neq 0 \wedge b = 0</math> impossibile</p>
70	$(2a - b)x + b = a(2 + x)$	<p>se <math>a \neq b</math> <math>x = \frac{2a - b}{a - b}</math>            se <math>a = b</math> impossibile</p>
71	$ax + 1 - a^2 = x$	<p>se <math>a \neq 1</math> <math>x = a + 1</math>            se <math>a = 1</math> indeterminata</p>
72	$a^2(x - 1) + b^2 = 2abx - b^2x$	<p>se <math>a \neq b</math> <math>x = \frac{a + b}{a - b}</math>            se <math>a = b</math> indeterminata</p>
73	$a^2(a - x) - b^2(b + x) = abx$	<p>se <math>a \neq 0 \wedge b \neq 0</math> <math>x = a - b</math>            se <math>a = b = 0</math> indeterminata</p>

74	$2a^2x - a^2(x + 3) = a^2(a - 3)$	<p>se <math>a \neq 0</math> <math>x = a</math>  se <math>a = 0</math> indeterminata</p>
75	$(2x + a)^2 - 4a(x + a) = x(4x - 3a)$	<p>se <math>a \neq 0</math> <math>x = a</math>  se <math>a = 0</math> indeterminata</p>
76	$(3x - 5a)^2 - (x - 5a)(3x - 2a) = 9a^2 + 6x(x - 2a)$	<p>se <math>a \neq 0</math> <math>x = 6a</math>  se <math>a = 0</math> indeterminata</p>
77	$3x^2 - (x - a)(3x - 4a) = 4a^2 + 3ax$	<p>se <math>a \neq 0</math> <math>x = 2a</math>  se <math>a = 0</math> indeterminata</p>
78	$a(x - a) + b(x - 2a) - b^2 = 0$	<p>se <math>a \neq b</math> <math>x = a + b</math>  se <math>a = b</math> indeterminata</p>
79	$2a^2b - (a - b)x = 2b(b^2 + 2a^2) - (a + b)x$	<p>se <math>b \neq 0</math> <math>x = a^2 + b^2</math>  se <math>b = 0</math> indeterminata</p>
80	$ax - a = 2bx + 4b$	<p>se <math>a \neq 2b</math> <math>x = \frac{a + 4b}{a - 2b}</math>  se <math>a = 2b</math> impossibile</p>
81	$x(a - 2b) = (a - 2b)^2$	<p>se <math>a \neq 2b</math> <math>x = a - 2b</math>  se <math>a = 2b</math> indeterminata</p>



82	$(x - b)(x + b) - (x - a)(x + a) + bx = ax$	<p>se <math>a \neq b</math> <math>x = a + b</math>            se <math>a = b</math> indeterminata</p>
83	$(x - b)^2 - (x - a)^2 = a^2 - b^2$	<p>se <math>a \neq b</math> <math>x = a + b</math>            se <math>a = b</math> indeterminata</p>
84	$a(a - x) - b(x - b) = (a - b)^2$	<p>se <math>a \neq -b</math> <math>x = \frac{2ab}{a + b}</math>            se <math>a = -b \neq 0</math> impossibile            per <math>a = b = 0</math> indeterminata</p>
85	$(a - 1)x = a^2 - a$	<p>se <math>a \neq 1</math> <math>x = a</math>            se <math>a = 1</math> indeterminata</p>
86	$(2a + 1)x = a$	<p>se <math>a \neq -\frac{1}{2}</math> <math>x = \frac{a}{2a + 1}</math>            se <math>a = -\frac{1}{2}</math> impossibile</p>
87	$(2a - 1)x = a + 3$	<p>se <math>a \neq \frac{1}{2}</math> <math>x = \frac{a + 3}{2a - 1}</math>            se <math>a = \frac{1}{2}</math> impossibile</p>
88	$(1 + a)x = a(2x + 2a + 1) - 2a^2$	<p>se <math>a \neq 1</math> <math>x = \frac{a}{1 - a}</math>            se <math>a = 1</math> impossibile</p>
89	$a^3 - x - a^2x = 1 + ax$	$x = a - 1$
90	$3ax + a = 2a^2 - 3a$	<p>se <math>a \neq 0</math> <math>x = \frac{2}{3}(a - 2)</math>            se <math>a = 0</math> indeterminata</p>
91	$6 + (a^2 + 1)x = (a^2 + 1)^2 - 2(a^2 - 2)$	$x = a^2 - 1$

92	$(2a - x)x = 4ax + (2a - x^2)$	<p>se <math>a \neq 0</math> <math>x = -1</math>            se <math>a = 0</math> indeterminata</p>
93	$bx(b^2 + 1) - (bx - 1)(b^2 - 1) = 2b^2$	<p>se <math>b \neq 0</math> <math>x = \frac{1 + b^2}{2b}</math>            se <math>b = 0</math> impossibile</p>
<b>discuti e risolvi le seguenti equazioni letterali intere con parte letterale al denominatore</b>		
94	$\frac{3}{a} - \frac{x + 2}{2} = 0$	<p>C.E. <math>a \neq 0</math>  <math>x = \frac{6 - 2a}{a}</math></p>
95	$\frac{1 + x}{3} = \frac{3}{a}$	<p>C.E. <math>a \neq 0</math>  <math>x = \frac{9 - a}{a}</math></p>
96	$\frac{2x - 1}{3b} - \frac{2}{b} = -\frac{x}{3}$	<p>C.E. <math>b \neq 0</math>            se <math>b = -2</math> impossibile  <math>b \neq -2</math> <math>x = \frac{7}{2 + b}</math></p>
97	$\frac{1 - bx}{b} - x + \frac{x}{2} = 0$	<p>C.E. <math>b \neq 0</math>  <math>x = \frac{2}{3b}</math></p>
98	$1 + \frac{x}{a} = x + 2$	<p>C.E. <math>a \neq 0</math>            se <math>a = 1</math> impossibile            se <math>a \neq 1</math> <math>x = \frac{a}{1 - a}</math></p>
99	$\frac{2(2 - x)}{b} = b - x$	<p>C.E. <math>b \neq 0</math>            se <math>b = 2</math> indeterminata  <math>b \neq 2</math> <math>x = b + 2</math></p>
100	$\frac{x - 1}{a} - \frac{x}{4} = -\left(\frac{2x + 3}{4a}\right)$	<p>C.E. <math>a \neq 0</math>            se <math>a = 6</math>: impossibile            se <math>a \neq 6</math> <math>x = \frac{1}{6 - a}</math></p>
101	$\frac{2x}{1 + a} - \frac{x + 5}{3} = -1 + \frac{a}{1 + a}$	<p>C.E. <math>a \neq -1</math>            se <math>a = 5</math> impossibile  <math>a \neq 5</math> <math>x = \frac{5a + 2}{5 - a}</math></p>

102	$\frac{7x + x^2}{(3a + 5)(a - 2)} = \frac{1}{a - 2} - \frac{9 - (x + 3)^2}{(3a + 5)(a - 2)}$	$\begin{aligned} \text{C.E. } a \neq 2 \quad a \neq -\frac{5}{3} \\ x = 3a + 5 \end{aligned}$
103	$\frac{5 - 3x}{a - 4} + \frac{3x + 1}{a + 4} = \frac{2x + 16a}{a^2 - 16}$	$\begin{aligned} \text{C.E. } a \neq \pm 4 \\ x = \frac{8 - 5a}{13} \end{aligned}$
104	$1 - \frac{x}{b - 1} = \frac{x - 1}{b + 1}$	$\begin{aligned} \text{C.E. } b \neq \pm 1 \\ \text{se } b = 0 \text{ impossibile} \\ \text{se } b \neq 0 \quad x = \frac{b^2 + b - 2}{2b} \end{aligned}$
105	$\frac{x + 2a}{2b} = \frac{2b - x}{2a}$	$\begin{aligned} \text{C.E. } a \neq 0 \quad b \neq 0 \\ \text{se } a = -b \text{ indeterminata} \\ \text{se } a \neq -b \quad x = 2(b - a) \end{aligned}$
106	$\frac{2a + bx}{b^2 + 2b + 1} = \frac{2a + bx}{b^2 + 2b + 1} + \frac{6ax + b - 1}{b + 1}$	$\begin{aligned} \text{C.E. } b \neq -1 \\ \text{se } a = 0 \text{ impossibile} \\ \text{se } a \neq 0 \quad x = \frac{1 - b}{6a} \end{aligned}$
107	$\frac{2x(b - a)}{a} = \frac{x}{b} - \frac{x(ab + a) - 3}{ab}$	$\begin{aligned} \text{C.E. } a \neq 0 \quad b \neq 0 \\ \text{se } a = 2b \text{ impossibile} \\ \text{se } a \neq 2b \quad x = \frac{3}{b(2b - a)} \end{aligned}$
108	$\frac{1}{b^2 - 4a^2} + \frac{x}{2a + b} = \frac{x}{b - 2a}$	$\begin{aligned} \text{C.E. } a \neq \pm \frac{b}{2} \\ \text{se } a = 0: \text{impossibile} \\ \text{se } a \neq 0 \quad x = \frac{1}{4a} \end{aligned}$
109	$\frac{x + 2b}{a + 2b} + \frac{x - 2b}{a - 2b} = \frac{x - 2a}{a} + 3$	$\begin{aligned} \text{C.E. } a \neq \pm 2b \\ \text{se } a = 0 \text{ impossibile} \\ \text{se } a \neq 0 \quad x = a \end{aligned}$
110	$\frac{2 - bx}{b^3 - 1} = \frac{1}{b^2 + b + 1} + \frac{x - 1}{1 - b}$	$\begin{aligned} \text{C.E. } b \neq 1 \\ x = \frac{b^2 + 2b - 2}{b^2 + 1} \end{aligned}$

111	$\frac{2(a-x)}{b-a} = \frac{x+a}{a+b} + \frac{x+b}{a-b} - \frac{x-b}{a+b}$	<i>C.E.</i> $b \neq \pm a$ $x = 3a$
112	$\frac{x-a}{1-ab} + \frac{x+a}{1+ab} - \frac{1}{b} = 0$	<i>C.E.</i> $a \neq \pm \frac{1}{b}$ $x = \frac{1+a^2b^2}{2b}$
113	$\frac{x}{3(a-1)} = \frac{a}{a+3b} + \frac{3b}{a+3b}$	<i>C.E.</i> $a \neq 1$ $a \neq -3b$ $x = 3(a-1)$
114	$\frac{x-a}{b} + \frac{x-b}{a} = 2$	<i>C.E.</i> $a \neq 0$ $b \neq 0$ se $a = -b$ indeterminata se $a \neq -b$ $x = a+b$
115	$\frac{x-a-3b}{a} + \frac{x-4b}{b} = \frac{2a}{b}$	<i>C.E.</i> $a \neq 0 \wedge b \neq 0$ se $a = -b$ indeterminata se $a \neq -b$ $x = 2a+3b$
116	$\frac{3x-3a+5b}{2b} + \frac{3x-a+3b}{2a} - 2 = 0$	<i>C.E.</i> $a \neq 0 \wedge b \neq 0$ se $a = -b$ $x = a-b$
117	$\frac{2x-b}{b} + \frac{b+x}{a} - \frac{2a^2+b^2}{ab} = 0$	<i>C.E.</i> $a \neq 0 \wedge b \neq 0$ se $a = -\frac{b}{2}$ indeterminata se $a \neq -\frac{b}{2}$ $x = a$
118	$\frac{6a+x}{4a} - \frac{x-4b}{3b} - \frac{b+6a}{4a} = 1$	<i>C.E.</i> $a \neq 0 \wedge b \neq 0$ se $a = \frac{3}{4}b$ indeterminata se $a \neq \frac{3}{4}b$ $x = b$
119	$\frac{x+a}{a+1} - \frac{x-a}{a-1} = \frac{3(x-a^2)}{a^2-1}$	<i>C.E.</i> $a \neq \pm 1$ $x = a^2$

120	$\frac{x+1}{1-a} - \frac{x+1}{1+a} = \frac{a(x-a)}{1-a} - \frac{x-a}{1+a}$	$C.E. a \neq \pm 1$ $x = \frac{a(a+1)}{a-1}$
121	$\frac{ax}{a^2-1} - \frac{ax-1}{a^2+1} - \frac{2a^2}{a^4-1} = 0$	$C.E. a \neq \pm 1$ se $a = 0$ impossibile se $a \neq 0$ $x = \frac{a^2+1}{2a}$
122	$\frac{abx+b^3}{a^4+ab^3} + \frac{a-3b}{3a^2+3ab} = \frac{x}{3a^2-3ab+3b^2}$	$C.E. a \neq -b$ se $a = 2b$ indeterminata se $a \neq 2b$ $b \neq 0$ $x = a - 2b$
123	$\left( \frac{\frac{bx}{b^2-9}}{\frac{a-3}{b+3}} - \frac{bx}{9-3a-3b+ab} \right) \frac{a-3}{2} = 0$	$C.E. a \neq 3 \wedge b \neq \pm 3$ indeterminata
<b>discuti e risolvi le seguenti equazioni letterali frazionarie</b>		
124	$\frac{x-a}{x} = a$	$C.E. x \neq 0$ se $a = 0 \vee a = 1$ impossibile se $a \neq 0 \wedge a \neq 1$ $x = \frac{a}{1-a}$
125	$\frac{1}{x} = \frac{b}{b^2+1}$	$C.E. x \neq 0$ se $b = 0$ impossibile se $b \neq 0$ $x = \frac{b^2+1}{b}$
126	$\frac{a^2x+2}{2a+x} = 1$	$C.E. x \neq -2a$ se $a \neq \pm 1$ $x = \frac{2}{a+1}$ se $a = 1$ indeterminata se $a = -1$ impossibile
127	$\frac{x-a}{1+ax} = 4$	$C.E. x \neq -\frac{1}{a}$ se $a \neq \frac{1}{4}$ $x = \frac{a+4}{1-4a}$ se $a = \frac{1}{4}$ impossibile
128	$\frac{3x^2}{x^2-a^2} + \frac{x-a}{x+a} - \frac{x+a}{x-a} = 3$	$C.E. x \neq \pm a$ se $a \neq 0$ $x = \frac{3}{4}a$ se $a = 0$ impossibile

129	$\frac{a-b}{x+b} + \frac{2b(a-2b)}{x^2-b^2} = \frac{a+b}{x-b}$	$\begin{array}{l} \pm b \\ \text{se } b \neq 0 \quad x = -2b \\ \text{se } b = 0 \text{ impossibile} \end{array}$
130	$\frac{ax}{2-x} - \frac{2}{2-x} = -1$	$\begin{array}{l} \text{C.E. } x \neq 2 \\ \text{se } a = 1 \text{ indeterminata} \\ \text{se } a \neq 1 \quad x = 0 \end{array}$
131	$\frac{2b}{x-1} = \frac{bx}{x^2-2x+1}$	$\begin{array}{l} \text{C.E. } x \neq 1 \\ \text{se } b = 0 \text{ indeterminata} \\ \text{se } b \neq 0 \quad x = 2 \end{array}$
132	$\frac{3x+2a}{3x} = \frac{7x+3a}{2x}$	$\begin{array}{l} \text{C.E. } x \neq 0 \\ \text{se } a = 0 \text{ impossibile} \\ \text{se } a \neq 0 \quad x = -\frac{1}{3}a \end{array}$
133	$\frac{x^2}{x^2-a^2} = \frac{x}{x-a} - \frac{a}{x-a}$	$\begin{array}{l} \text{C.E. } x \neq \pm a \\ \text{se } a = 0 \text{ indeterminata} \\ \text{se } a \neq 0 \text{ impossibile} \end{array}$
134	$\frac{x}{x-2b} + \frac{2b}{x+2b} = \frac{x^2}{x^2-4b^2}$	$\begin{array}{l} \text{C.E. } x \neq \pm 2b \\ \text{se } b = 0 \text{ indeterminata} \\ \text{se } b \neq 0 \quad x = b \end{array}$
135	$\frac{2b+2}{b-1} = \frac{b-2}{x} + \frac{1-2b}{x}$	$\begin{array}{l} \text{C.E. } x \neq 0 \wedge b \neq 1 \\ \text{se } b = -1 \text{ indeterminata} \\ \text{se } b \neq \pm 1 \quad x = \frac{1-b}{2} \end{array}$
136	$\frac{5(ax-x)+5x}{4x^2-a^2} = \frac{2}{2x+a} + \frac{3}{2x+a}$	$\begin{array}{l} \text{C.E. } x \neq \pm \frac{1}{2}a \\ \text{se } a = 2 \text{ impossibile} \\ \text{se } a \neq 0 \wedge a \neq 2 \quad x = \frac{a}{5(2-a)} \end{array}$
137	$\frac{2a}{a+2} - \frac{a-1}{x-1} = \frac{3a+1}{x-1}$	$\begin{array}{l} \text{C.E. } x \neq 0 \quad x \neq -2 \\ \text{se } a = 0 \text{ indeterminata} \\ \text{se } a \neq 0 \quad x = 2a+5 \end{array}$

138	$\left(a - \frac{a}{ax+1}\right) : \left(1 + \frac{a}{ax+1}\right) = 1 + a$	$C.E. \ x \neq -\frac{1}{a} \quad x \neq -\frac{a+1}{a} \wedge a \neq 0$ $x = -\frac{(a+1)^2}{a}$
139	$\frac{a+b+(x+3)^2}{x^2+8} - 1 = \frac{ab}{ab(x^2+8)}$	$C.E. \ a \neq 0 \wedge b \neq 0$ $x = -\frac{a+b}{6}$
140	$\frac{ab+x+a+bx}{x-a-ab+bx} : \left(\frac{x+a}{x-a} - \frac{x-a}{x+a}\right) = \frac{x}{4a}$	$C.E. \ x \neq \pm a \wedge b \neq -1 \wedge a \neq 0$ $x = -\frac{a}{2}$