Equazioni frazionarie e letterali : esercizi risolti

Esercizio 1

$$\frac{3}{x+2}+\frac{5}{2-x}=0$$

$$\left[x=-8 \;\; C.E. \; x\neq 2 \;\; \wedge \;\; x\neq -2\right]$$

Esercizio 2

$$\frac{3}{x}+\frac{4}{1-x}=0$$

$$\left[x=-3 \;\; C.E. \;\; x\neq 0 \;\wedge\; x\neq 1\right]$$

Esercizio 3

$$\frac{7+x}{2x}=\frac{2-x}{1-2x}$$

$$\left[x=\frac{7}{17} \;\; C.E. \; x\neq 0 \;\wedge\; x\neq \frac{1}{2}\right]$$

Esercizio 4

$$\frac{x+4}{x-1}-\frac{2-x}{x+1}=2$$

$$\left[x=-4 \;\; C.E. \; x\neq 1 \;\wedge\; x\neq -1\right]$$

Esercizio 5

$$\frac{3x}{x+1}-\frac{2x}{x-2}=1$$

$$\left[\frac{2}{7}\quad C.E.\ \ x\neq -1\ \wedge\ \ x\neq 2\right]$$

Esercizio 6

$$\frac{4}{2x+1}=1-\frac{1+x}{x-1}$$

$$\left[x=\frac{1}{4}\quad C.E.\ \ x\neq 1\ \wedge\ x\neq -\frac{1}{2}\right]$$

Esercizio 7

$$1-\frac{x+3}{x-2}=\frac{13-4x}{2-x}$$

$$\left[impossibile\quad C.E.\ x\neq 2\right]$$

Esercizio 8

$$\frac{2}{x-3}-\frac{x}{9-x^2}=0$$

$$\left[x=-2\ \ C.E.\ x\neq -3\wedge x\neq 3\right]$$

Esercizio 9

$$\frac{1}{x+1}-\frac{1}{x^2+5x+4}=\frac{1}{3x+12}$$

$$\left[\right.$$

$$\left[impossibile\ C.E.\ x \neq -4 \wedge x \neq -1 \right]$$

Esercizio 10

$$\frac{3x-12}{2x-2} - \frac{4-x}{1-x} - \frac{1}{2} = 0$$

$$\left[impossibile\ \ C.E.\ x \neq 1 \right]$$

Esercizio 11

$$\frac{x+3}{2x} + \frac{x+1}{2x+8} = \frac{x^2+4x+6}{x^2+4}$$

$$\left[identità\ \ C.E.\ x \neq -4 \wedge\ x \neq 0 \right]$$

Esercizio 12

$$1 + \frac{1-2x}{6x-4x^2} = \frac{2x}{2x-3} - \frac{1}{2x}$$

$$\left[x = -2 \quad C.E.\ \ x \neq 0\ \wedge\ x \neq \frac{3}{2} \right]$$

Esercizio 13

$$(a-2)x = 2a^2 - 8$$

$$\begin{bmatrix} a \neq 2 & \rightarrow & x = 2(a+2) \\ a = 2 & \rightarrow & ind. \end{bmatrix}$$

Esercizio 14