

Esercizi del Corso di Recupero Ofa di Matematica

1 Prima Lezione:

1.

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

2.

$$\frac{x+3}{x+1} + \frac{x+5}{x+2} = \frac{2x+2}{x}$$

3.

$$\frac{x^2}{200-x^2} = \frac{1}{7}$$

4.

$$4 + (1+2x)^2 = 0$$

5.

$$(2x-1)^2 + 4(x-2)(x+2) = -18$$

6.

$$x^2 + 2x + 2 > 0$$

7.

$$2x^2 + 6x + 2 \leq 0$$

8.

$$6x^2 - 5x + 1 > 0$$

9.

$$4x(x-2) \leq 11 + (x-4)^2$$

10.

$$(x-3)^3 - (x-2)(x+2) \leq (x-1)(x^2+x+1) + x(1+2x)$$

11.

$$\frac{2-x}{x^2-9} > 0$$

12.

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

13.

$$\frac{16-x^2}{x^2+x+7} > 0$$

14.

$$-x^2 + 25 \geq 0$$

15.

$$x(x-3) + 5 < \frac{3}{4}x$$

16.

$$\frac{13}{9}x^2 + 1 \leq x^2 + \frac{4}{3}x$$

17.

$$x(x+1) + \frac{1}{6} > 2\left(x + \frac{11}{24}\right)$$