



VERIFICA DI MATEMATICA

CLASSE 2^B – 17 Novembre 2006

COGNOME _____ NOME _____

1. $\frac{x - \frac{1}{3}}{3} - \frac{3x - 1}{9} - \frac{3x - 1}{3} \geq \frac{1 - 3x}{6}$ $x \leq \frac{1}{3}$
2. $3(7x - 2) + \frac{1}{7} + 7\left(x + \frac{1}{7}\right)(7x - 2) - \frac{x}{2} > (7x - 2)^2$ $x > \frac{2}{7}$
3. $\begin{cases} \frac{x - 5}{2x - 3} \leq 0 \\ \frac{13}{x} - 21 < 5 \end{cases}$ $\frac{3}{2} < x \leq 5$
4. $\frac{4}{3} \cdot \frac{2x - 1}{6 - x} \geq \frac{4}{3(x - 6)}$ $0 \leq x < 6$
5. $\begin{cases} 2x + 3 - x + x^2 > x(x + 2) - 3 \\ 2x(x - 1) - x^2 + x - 3 \leq x(x - 2) + 7 \end{cases}$ $x < 6$
6. $|x + 3 + |x - 2|| = 5$ $x \leq 2$
7. $\left|x + \frac{1}{x^2 + 1} - (x + 5)^2\right| + |x + 3| \geq 0$ $\forall x \in \mathbb{R}$
8. $\left|\frac{x + 2}{x^2 - 1}\right| \leq 0$ $x = -2$
9. $a(x - 3) \leq 5(x - 3)$ *Se $a > 5$: $x \leq 3$; se $a = 5$; $\forall x \in \mathbb{R}$; se $a < 5$: $x \geq 3$*
10. $\left|\frac{x}{x + 1}\right| < 2$ $x < -1 \vee x > -\frac{2}{3}$
11. $|3x + 4| + |x + 1| + |2x - 5| + |x + 3| = -1$ $\nexists x \in \mathbb{R}$
12. $\frac{x^4(x^2 + 5)(x - 3)}{(1 - 2x)(x^2 + 2)} \leq 0$ $x < \frac{1}{2} \vee x \geq 3$
13. $x^6 - 1 \leq 0$ $-1 \leq x \leq 1$

Totale punti 34. Sufficienza con punti 18,25.

BUON LAVORO!!!