<table>
<thead>
<tr>
<th></th>
<th>Disequazioni di vario tipo</th>
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</table>
| 1 | \[
\frac{x^2 - 6x + 9}{x^2(x^2 + 4x + 4)} < 0
\] | impossibile |
| 2 | \[
\frac{3x^2 - 75}{x(x + 4)(x - 1)} \leq 0
\] | \[x \leq -5 \lor -4 < x < 0 \lor 1 < x \leq 5\] |
| 3 | \[(2x - 5)^6 \geq 0\] | \[\forall x \in \mathbb{R}\] |
| 4 | \[(4 - x)^2(x + 5)(2x - 1) \geq 0\] | \[x \leq -5 \lor x \geq \frac{1}{2}\] |
| 5 | \[
\frac{x^7(8 - x)^9}{(x + 2)^{11}} > 0
\] | \[x < -2 \lor 0 < x < 8\] |
| 6 | \[
\frac{14}{(2x - 12)^{10}} < 0
\] | impossibile |
| 7 | \[
\frac{-7}{(3x + 6)^4} < 0
\] | \[x \neq -2\] |
| 8 | \[
\frac{18}{(5x + 10)^7} < 0
\] | \[x < -2\] |
| 9 | \[
\frac{1}{(x - 2)^3} < 1
\] | \[x < 2 \lor x > 3\] |
| 10 | \[
\frac{x^3 - 3x^2}{(x - 1)^3} \geq 0
\] | \[x < 1 \lor x \geq 3\] |
| 11 | \[(3x + 2)^2 \geq (3x - 2)^2\] | \[x \geq 0\] |
| 12 | \[
\frac{x^2}{4} - x < \frac{21}{4}
\] | \[-3 < x < 7\] |
| 13 | \[4x^2 + 21 - x > 0\] | \[\forall x \in \mathbb{R}\] |
| 14 | \[4x(x - 2) \leq 11 + (x - 4)^2\] | \[-3 \leq x \leq 3\] |
| 15 | \[
\frac{x - 1}{x^2 + 2x + 2} < 0
\] | \[x < 1\] |
| 16 | \[
\frac{2}{x^2 + 1} > 1
\] | \[-1 < x < 1\] |
| 17 | \[
\frac{6x^2 - 7x + 3}{2x(3x - 1)} < 1
\] | \[x > \frac{3}{5}\] |
<p>| 18 | ( \frac{x}{\sqrt{2}} + \frac{\sqrt{2}}{\sqrt{2} - 2} &gt; x - \frac{1}{2 - \sqrt{2}} ) | ( x &gt; -\sqrt{2} + 1 ) |
| 19 | ( \frac{(x + \sqrt{2})(\sqrt{2} - x)}{4} + \frac{x}{3} &gt; 2(x + 1) - 3(1 - 2x) - \frac{1}{4}x^2 ) | ( x &lt; \frac{2}{3} ) |
| 20 | ( \frac{1}{9}[x(x - 1) - \frac{(2x - 1)^2 + 3}{4}] + \frac{1}{6}(x + \frac{1}{3}) \leq \frac{1}{4}(x + 1) + 2x - 1 ) | ( x \geq \frac{1}{3} ) |
| 21 | ( \frac{1}{2}(x + \sqrt{3})^2 - \frac{3}{\sqrt{2}}(x + \frac{\sqrt{3}}{2} + 4) &lt; \frac{2x^2 - 3\sqrt{6} + 6}{4} + x\sqrt{3} ) | ( x &gt; -4 ) |
| 22 | ( \frac{2}{5}(x - 2)(x - 4) &lt; \frac{x + 4}{2} - \frac{x^2}{4} ) | ( \frac{6}{13} &lt; x &lt; 4 ) |
| 23 | ( \frac{-x(1 - x)(1 + 3x)}{3} \leq x + \frac{x^2}{6} + \frac{11}{6} ) | (-1 \leq x \leq 13 ) |
| 24 | ( \frac{x(x + 4)}{15} &gt; 1 - \frac{x(x - 7)}{30} ) | ( x &lt; -\frac{10}{3} \lor x &gt; 3 ) |
| 25 | ( \frac{23 + (x - 2)(x + 1)}{3} - 5 &lt; \frac{(x - 1)(x + 2)}{2} + \frac{x - x^2}{4} ) | ( 4 &lt; x &lt; 9 ) |
| 26 | ( \frac{(2x - 3)(2x + 1)}{4} + \frac{7x}{12} &lt; \frac{(x - 1)(x + 2)}{6} - \frac{9}{4} ) | impossibile |
| 27 | ( \frac{2x}{2x^2 + 7x + 5} &gt; \frac{x}{x^2 + 6x + 5} ) | ( x &lt; -5 \lor -\frac{5}{2} &lt; x &lt; -1 \lor x &gt; 0 ) |
| 28 | ( \frac{3 + 2x}{2x - 1} - \frac{10}{4x + 2} &gt; 1 ) | ( x &lt; -\frac{1}{2} \lor \frac{1}{2} &lt; x &lt; \frac{9}{2} ) |
| 29 | ( \frac{2 - x}{1 - x} + 1 \geq \frac{x^2 - 3}{x^2 - 2x + 1} ) | ( x \leq 2 \lor x \geq 3 \land x \neq 1 ) |
| 30 | ( 1 - \frac{2x}{x - 3} &gt; \frac{2(2x + 7)}{(x - 3)^2} ) | impossibile |
| 31 | ( |3 - 5x| &gt; 3 - x^2 ) | ( x &lt; 0 \lor x &gt; 1 ) |
| 32 | ( |x^2 - 1| + x^2 &gt; x ) | ( x \neq 1 ) |
| 33 | ( |x^2 - 4| + |3x| &lt; 4 ) | impossibile |
| 34 | ( |5x - x^2| &lt; 6 ) | (-1 &lt; x &lt; 2 \lor 3 &lt; x &lt; 6 ) |</p>
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<td>(\frac{x^2 - 6x + 5}{\sqrt{x+2} + 3x - 1} &lt; 0)</td>
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<td>(\frac{5 - 2x + \sqrt{2x-1}}{\sqrt{x^2} + 2 - \sqrt{x} + 3} &gt; 0)</td>
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<td>43</td>
<td>(\frac{\sqrt{9x^2 + 6x + 1} - 7}{x + 1 - \sqrt{x}} &gt; 0)</td>
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<td>(\sqrt{1 - x^3} + x \over x - 3 \over x + 2 - 2 &gt; 0)</td>
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