

Risolvere le disequazioni

1) $(x-1)((3x-1)^4-2)(x^3-7) < 0.$

2) $(\sqrt{x^2-7}-1)^6 < 5(\sqrt{x^2-7}-1)^3 - 6.$

3) $\left(\frac{x^7}{x^7-3}\right)^{92} \geq 7\left(\frac{x^7}{x^7-3}\right)^{10}.$

4) $\sqrt{(x^3-2)x+2-x^3} \left(\frac{x^8}{1-2x^8}-7\right) < 0.$

5) $\left(\sqrt{(x^3-2)x+2-x^3}+x^6+6^x\right)\left(\frac{x^8}{1-2x^8}-7\right) < 0.$

6) $\frac{1}{(3x+5)^7} + \sqrt{x^8 - \frac{9}{10}} < 6 + \sqrt{x^8 - \frac{9}{10}}.$

7) $\left(x^8 + \frac{1}{10}\right)^{\frac{1}{(3x+5)^7}} < \left(x^8 + \frac{1}{10}\right)^6.$

8) $\frac{\sqrt{86^4-(3x-1)^4}}{\sqrt[4]{x^7-2} \sqrt[4]{17-x}} > 0.$