Esercizi sulle disequazioni con valore assoluto
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1) $|9-x^2| \le 3$ sol $\{-2\sqrt{3} \le x \le -\sqrt{6}\} \cup \{\sqrt{6} \le x \le 2\sqrt{3}\}$

2) $|x^2+5x+3| > 9$ sol $\{x<-6\} \cup \{x>1\}$

3) $|2x^2-x+4| \ge 10$ sol $\left\{x \le -\dfrac{3}{2}\right\} \cup \{x \ge 2\}$

4) $|x^2-x| > 2$ sol $\{x<-1\} \cup \{x>2\}$

5) $|2x| > 4x^2-2$ sol $\{-1<x<1\}$

6) $|x^2-2x| < 1-2x^2$ sol $\left\{-\dfrac{1}{3} < x < \sqrt{2}-1\right\}$

7) $|x^2-1| \ge x^2-2x+1$ sol $\{x \ge 0\}$

8) $|x^2-x-2| \ge x^2-2x+3$ sol $\left\{\dfrac{1}{2} \le x \le 1\right\} \cup \{x \ge 5\}$

9) $|4x^2-4x+1| > \dfrac{x^2}{9}$ sol $\left\{x < \dfrac{3}{7}\right\} \cup \left\{x > \dfrac{3}{5}\right\}$

10) $|x^2-4x+3| \ge \dfrac{x^2}{3}$ sol $\left\{x \le 3-\dfrac{3\sqrt{2}}{2}\right\} \cup \left\{x = \dfrac{3}{2}\right\} \cup \left\{x \ge 3+\dfrac{3\sqrt{2}}{2}\right\}$

11) $|x^2-4x+3| \ge x^2$ sol $\left\{x \le \dfrac{3}{4}\right\}$

12) $|x-3| < |x^2-9|$ sol $\{x<-4\} \cup \{-2<x<3\} \cup \{x>3\}$

13) $|5+x^2| \ge |x^2-3x+2|$ sol $\{x \ge -1\}$

14) $|5+x^2| \ge |3+x^2|$ sol $\{x \in R\}$

15) $|x^2-5x+6| < |x^2-x-6|$ sol $\{0<x<3\} \cup \{x>3\}$

16) $|x^2-2x-8| \le |2x-3x^2|$ sol $\{x \le -1\} \cup \{x \ge 2\}$

17) $|3x-2| < |x^2-1|+x+6$ sol $\{x<-3\} \cup \{x>-1\}$

18) $|2x+4| < |x^2-x+7|+2x-2$ sol $\{x \in R\}$

19) $|2x+4| > |2x+4|+5$ sol. impossibile