Risolvi le seguenti disequazioni.

400 $e^{\frac{1}{x^2}} \geq \sqrt[4]{e}$ $[-2 \leq x \leq 2, \text{ con } x \neq 0]$

401 $(0,2)^{x^2-1} \geq \frac{1}{5}$ $[-\sqrt{2} \leq x \leq \sqrt{2}]$

402 $(4^x - 2)^3 \geq 0$ $\left[x \geq \frac{1}{2}\right]$

403 $2^x + 2^{-x} \leq \frac{17}{4}$ $[-2 \leq x \leq 2]$

404 $e^{-x}\left(e^{4x} - \sqrt{e}\right) > 0$ $\left[x > \frac{1}{8}\right]$

405 $e^{-x}(x^2 - 5x + 4) \leq 0$ $[1 \leq x \leq 4]$

406 $e^{\frac{x}{x^2-1}} - 1 > 0$ $[-1 < x < 0 \vee x > 1]$

407 $\frac{e^{2x+1} - e^x}{e^{3x} - e} \geq 0$ $\left[x \leq -1 \vee x > \frac{1}{3}\right]$

408 $\frac{x-3}{9^x - \sqrt{3}} \leq 0$ $\left[\frac{1}{4} < x \leq 3\right]$

409 $\frac{e^{2x} - 1}{4 - x^2} < 0$ $[-2 < x < 0 \vee x > 2]$

410 $2^{2x} - 2^{x-1} - 2^{x+2} + 2 < 0$ $[-1 < x < 2]$

411 $2^{2x} - 2^{x+2} + 4 \leq 0$ $[x = 1]$

412 $2^{2x} - 2^{x+3} + 2^4 > 0$ $[x \neq 2]$

413 $e^{2x} - e^{x+1} + e^x - e \geq 0$ $[x \geq 1]$

414 $\frac{2^{x^2} \cdot \sqrt[3]{2^x}}{\sqrt{2}} \geq \frac{1}{8}$ $[\forall x \in \mathbb{R}]$

415 $\frac{1}{3} \cdot 3^{x^2-1} \geq \frac{3\sqrt{3}}{3^x}$ $\left[x \leq \frac{-1-\sqrt{15}}{2} \vee x \geq \frac{-1+\sqrt{15}}{2}\right]$

416 $2^{-3x} + 2^{-3x+2} + 2^{-3x+1} \geq 28$ $\left[x \leq -\frac{2}{3}\right]$

417 $\frac{1}{e^{\frac{x^2-2}{x}}} \leq e$ $[-2 \leq x < 0 \vee x \geq 1]$

418 $3^{3x} - 3^{x+1} - 3^{2x+1} + 9 \geq 0$ $\left[x \leq \frac{1}{2} \vee x \geq 1\right]$

419 $\left(\frac{2}{3}\right)^{-x} + \left(\frac{2}{3}\right)^{x} \geq 2 \cdot \left(\frac{3}{2}\right)^{x}$ $[x \leq 0]$

420 $\frac{1}{4^x - 1} - \frac{2}{4^x + 1} < \frac{1}{16^x - 1}$ $\left[x < 0 \vee x > \frac{1}{2}\right]$

421 $\frac{\sqrt[3]{2^{-x}} \cdot 2^{x+1}}{2^{x+1} - 2^x} \geq 2\sqrt{2}$ $\left[x \leq -\frac{3}{2}\right]$

422 $2^{3x} - 3 \cdot 2^{2x+\frac{1}{2}} + 4 \cdot 2^x > 0$ $\left[x < \frac{1}{2} \vee x > \frac{3}{2}\right]$

423 $e^{-2x}\left(\frac{e^x}{\sqrt{e^{4x}}} - e^{2x}\right)(e^{2x} - e^3) > 0$ $\left[0 < x < \frac{3}{2}\right]$

424 $\frac{4^x \cdot 2^{1-2x}}{\sqrt[3]{8^{x-1}}} < 1$ $[x > 2]$

425 $\left[\left(\frac{2}{3}\right)^{-2x} - \frac{9}{4}\right]\left[\left(\frac{3}{2}\right)^{x-1} - \sqrt{\frac{3}{2}}\right] \leq 0$ $\left[1 \leq x \leq \frac{3}{2}\right]$

426 $\frac{8^x\sqrt{2} - 4}{1 - \sqrt{9^{-x}}} \geq 0$ $\left[x < 0 \vee x \geq \frac{1}{2}\right]$

427 $2\left(\frac{1}{16}\right)^x + 7\left(\frac{1}{4}\right)^x > 4$ $\left[x < \frac{1}{2}\right]$

428 $e^2 \cdot \frac{1}{e^{1-2x}} > \frac{e^{-x^2}}{e^3}$ $[\forall x \in \mathbb{R}]$

429 $3\left(\frac{1}{9}\right)^x > 10\left(\frac{1}{3}\right)^x - 3$ $[x < -1 \vee x > 1]$

430 $e^{4x} - e^{2x+2} - e^{2x} + e^2 < 0$ $[0 < x < 1]$