

233) $\sqrt{x-2} + \sqrt{6-x} > \sqrt{x+1}$

Risolvere le seguenti disequazioni fratte:

234) $\frac{3x-2}{2x-3} < 3$. $\left[x < \frac{3}{2}, x > \frac{7}{3} \right]$

235) $\frac{7x-4}{x+2} \geq 1$. $[x < -2, x \geq 1]$

236) $\frac{1}{x} < \frac{1}{3}$. $[x < 0, x > 3]$

237) $\frac{3x-2}{x-3} > 0$. $\left[x < \frac{2}{3}, x > 3 \right]$

238) $\frac{4x-1}{5x-2} < 0$. $\left[\frac{1}{4} < x < \frac{2}{5} \right]$

239) $\frac{x+3}{2-x} > 0$. $[-3 < x < 2]$

240) $\frac{2x+1}{3-x} < 0$. $\left[x < -\frac{1}{2}, x > 3 \right]$

241) $\frac{3x-1}{x+5} < 2$. $[-5 < x < 11]$

242) $\frac{x}{x+60} > \frac{7}{3x-5}$. $\left[x < -60, -10 < x < \frac{5}{3}, x > 14 \right]$

243) $\frac{1}{3x} + \frac{5-3x}{x+1} < 4$. $\left[x < -1, -\frac{1}{7} < x < 0, x > \frac{1}{3} \right]$

244) $\frac{x-1}{x-2} - \frac{x-2}{x-1} < \frac{8}{3}$. $\left[x < 1, \frac{5}{4} < x < 2, x > \frac{5}{2} \right]$

$$245) \frac{4x-21}{2x-11} - \frac{8-x}{x-5} < 1. \quad \left[5 < x < \frac{11}{2}, \frac{23}{4} < x < 6 \right]$$

$$246) \frac{x^2+3x+10}{x^2+5x-14} < 0. \quad [-7 < x < 2]$$

$$247) \frac{2x-5}{(x-3)^3(25-9x^2)} \geq 0. \quad \left[-\frac{5}{3} < x < \frac{5}{3}, \frac{5}{2} \leq x < 3 \right]$$

$$248) \frac{x+4}{2-x} > 1. \quad [-1 < x < 2]$$

$$249) \frac{2x}{3x-1} < \frac{2}{3}. \quad \left[x < \frac{1}{3} \right]$$

$$250) \frac{3}{2x-1} - \frac{4}{6x+3} > \frac{x+2}{4x^2-1}. \quad \left[-1 < x < -\frac{1}{2}, x > \frac{1}{2} \right]$$

$$251) \frac{1}{x^2-x-6} - \frac{2}{2x^2+3x-4} \geq 0. \quad \left[-\frac{16}{5} \leq x < -2, x > 3 \right]$$

$$252) \frac{4-5x}{\sqrt{2}x} < 0. \quad \left[x < 0, x > \frac{4}{5} \right]$$

$$253) \frac{\sqrt{3}x-1}{7-2x} \leq 0. \quad \left[x \leq \frac{\sqrt{3}}{3}, x > \frac{7}{2} \right]$$

$$254) \frac{\sqrt{2}x^2 - \sqrt{6}x}{4x-x^2} > 0. \quad [\sqrt{3} < x < 4]$$

$$255) \frac{(x-1)^3}{2x-5} < 0. \quad \left[1 < x < \frac{5}{2} \right]$$

$$256) \frac{x^2-4x+4}{x^2+x-6} \geq 0. \quad [x < -3, x > 2]$$

$$257) \frac{x^2+3x}{x^2-1} > 0. \quad [x < -3, -1 < x < 0, x > 1]$$

$$258) \frac{6x^2-13x+7}{x^2-2\sqrt{3}x+3} < 0. \quad \left[1 < x < \frac{7}{6} \right]$$

$$259) \frac{3x^2+14x-5}{2x^2+3x} > 0. \quad \left[x < -5, -\frac{3}{2} < x < 0, x > \frac{1}{3} \right]$$

$$260) \frac{\sqrt{2}x(x-\sqrt{2})}{x^3-3x^2+3x-1} \leq 0. \quad [x \leq 0, 1 < x \leq \sqrt{2}]$$

$$261) \frac{x^4-x^2}{3x+2} < 0. \quad [x < -1, -\frac{2}{3} < x < 0, 0 < x < 1]$$

$$262) \frac{x(x-4)(1-x)}{x^2-2x+1} > 0. \quad [x < 0, 1 < x < 4]$$

$$263) \frac{x-9x^3}{3x^2-x-2} \leq 0. \quad [-\frac{2}{3} < x \leq -\frac{1}{3}, 0 \leq x \leq \frac{1}{3}, x > 1]$$

$$264) \frac{x^4-2x^3-63x^2}{2x+7} > 0. \quad [-7 < x < -\frac{7}{2}, x > 9]$$

$$265) \frac{(1-x^2)(\sqrt{2}x-1)}{x^2-7} \geq 0. \quad [x < -\sqrt{7}, -1 \leq x \leq \frac{\sqrt{2}}{2}, 1 \leq x < \sqrt{7}]$$

$$266) 1 - \frac{5}{x} > 7. \quad [-\frac{5}{6} < x < 0]$$

$$267) \frac{\sqrt{2}}{x(x+\sqrt{2})} > \frac{1}{x}. \quad [-\sqrt{2} < x < 0]$$

$$268) \frac{1}{x^2-1} - \frac{1}{5} > 1. \quad [-\sqrt{\frac{11}{6}} < x < -1, 1 < x < \sqrt{\frac{11}{6}}]$$

$$269) \frac{3x+2}{7x-1} + \frac{1}{2} > \frac{1}{1-7x}. \quad [x < -\frac{5}{13}, x > \frac{1}{7}]$$

$$270) \frac{2}{x-1} \leq \frac{1}{x^2-x} + \frac{1}{x}. \quad [x < 0, 0 < x < 1]$$

$$271) \frac{12}{x-5} + \frac{4}{x+5} - 9 \geq \frac{8(2x-3)}{x^2-25}. \quad [-\frac{17}{3} \leq x < -5, 5 < x \leq \frac{17}{3}]$$

$$272) \frac{1}{x-1} - \frac{1}{4x+4} - \frac{1}{8} - \frac{2x-1}{2(x^2-1)} \leq 0. \quad [x \leq -5, -1 < x < 1, x \geq 3]$$

$$273) \frac{x+1}{x-1} \geq \frac{x-2}{x+2} + \frac{9}{5} \quad \left[-2 < x \leq -\frac{2}{3}, 1 < x \leq 3 \right]$$

$$274) \frac{2x+8}{x+1} - \frac{x+4}{x^2-1} + 1 > \frac{x+7}{x-1} \quad \left[x < -\frac{5}{2}, -1 < x < 1, x > 4 \right]$$

$$275) \frac{x+\sqrt{2}}{x-\sqrt{2}} > \sqrt{2} - 2x \quad [x > \sqrt{2}]$$

$$276) \frac{x^2-3x+2}{x^2-7x+12} > 1 \quad \left[\frac{5}{2} < x < 3, x > 4 \right]$$

$$277) \frac{3(1-x)}{x^2+3x-4} < \frac{3x+3}{x+4} - \frac{3x+1}{x-1} \quad [x < -4, -1 < x < 1]$$

$$278) \frac{x+12}{x+8} - \frac{3(x-1)}{x-6} \geq \frac{x-6}{x^2+2x-48} \quad [-8 < x < 6]$$

$$279) \frac{21}{x} - \frac{10}{x-2} < \frac{4}{x-3} \quad \left[x < 0, 2 < x < \frac{18}{7}, 3 < x < 7 \right]$$

$$280) \frac{5x^3+x^2-20x-4}{4x^3+12x^2-9x-27} > 0 \quad \left[x < -3, -2 < x < -\frac{3}{2}, -\frac{1}{5} < x < \frac{3}{2}, x > 2 \right]$$

$$281) \frac{4x-3}{4(x-3)} < \frac{3x-10}{x^2-2x-3} + \frac{1}{4(x+1)} \quad [-1 < x < 3]$$

$$282) \frac{x^4-56x+95}{x^2-7x+10} - 8 > 0 \quad [x < -\sqrt{5}, -\sqrt{3} < x < \sqrt{3}, 2 < x < \sqrt{5}, x > \sqrt{5}]$$

$$283) \frac{(x+1)^3-1}{(x-1)^3+1} > 1 \quad [x > 0]$$

$$284) \frac{x^5(x-1)^4}{x+3} \geq 0 \quad [x < -3, x \geq 0]$$

$$285) 1 + \frac{2x^2}{x(x+4)} + \frac{27}{2x^2+7x-4} - \frac{6}{2x-1} < 0 \quad \left[-4 < x < -\frac{1}{3} \right]$$

$$286) \frac{x^2 + x - 2}{x^2 - 10x + 21} - \frac{x - 1}{x - 3} < \frac{3(x + 1)}{x - 7} \quad [x < 0, 3 < x < 5, x > 7]$$

$$287) \frac{x^2(x - 3)}{x^2 - 4x + 3} - \frac{2x^2 + 6x - 8}{x^2 - 2x + 1} > 0. \quad [-2 < x < 1, x > 4]$$

$$288) \frac{x - 1}{x - 3} < \frac{5(x - 1)}{x^2 - 2x - 3}. \quad [-1 < x < 1, 3 < x < 4]$$

$$289) \frac{x^2(x - 2)}{x^2 - 5x + 6} - \frac{2x^2 + 5x + 3}{x^2 - 2x - 3} < 0. \quad [x < -1]$$

$$290) \frac{5x^2 - 3x - 2}{9x^2 + 15x - 6} < 0. \quad \left[-2 < x < -\frac{2}{5}, \frac{1}{3} < x < 1\right]$$

$$291) \frac{1}{2x} + \frac{4}{2x^2 + 5x} + \frac{1}{2x + 5} < 0. \quad \left[x < -\frac{13}{4}, -\frac{5}{2} < x < 0\right]$$

$$292) \frac{x}{x + 1} + \frac{31}{x^2 - 1} < 2 + \frac{9}{x - 1}. \quad [x < -12, -1 < x < 1, x > 2]$$

$$293) \frac{x^2 + 6}{x^2 - x - 2} + \frac{3}{2 - x} > \frac{x - 2}{x + 1}. \quad [-1 < x < 1, x > 2]$$

$$294) \frac{x^2(x - 2)^3(x + 3)}{(x - 4)^7} > 0. \quad [-3 < x < 0, 0 < x < 2, x > 4]$$

$$295) \frac{(x + 5)(x - \sqrt{3})(x + \sqrt{2})}{(2x - 3)(4x + 5)} < 0. \quad \left[x < -5, -\sqrt{2} < x < -\frac{5}{4}, \frac{3}{2} < x < \sqrt{3}\right]$$

$$296) \frac{x^2 - 3x - 18}{13x - x^2 - 42} \geq 0. \quad [-3 \leq x < 6, 6 < x < 7]$$

$$297) \frac{(x - 3)(x + 2)}{x^2 - 1} < 1. \quad [-5 < x < -1, x > 1]$$

$$298) \frac{3x + 4}{x^2 - 3x + 5} < 0. \quad \left[x < -\frac{4}{3}\right]$$

$$299) \frac{2x^2 + 18x - 4}{x^2 + 9x + 8} > 2. \quad [x < -1]$$

$$300) \frac{1}{x + 1} + \frac{2}{x + 3} > \frac{3}{x + 2}. \quad [-3 < x < -2, -1 < x < 1]$$