

$$20 \quad (x-1)\left(1+\frac{2}{x}\right)+x < 3-\frac{2}{x} \quad [x < 1 \wedge x \neq 0]$$

$$21 \quad \frac{x+1}{x^2-4}-\frac{1}{x+2}-\frac{2-x}{x^2+4x+4} \leq 0. \quad [x < 2 \wedge x \neq -2]$$

$$22 \quad \frac{3}{x^2-5x+6}+\frac{4-x}{3-x} > \frac{6-x}{2-x}; \quad \frac{x}{\sqrt{3}}-1 > 1-\frac{\sqrt{3}}{x}. \quad \left[2 < x < \frac{7}{3} \vee x > 3; x > 0 \wedge x \neq \sqrt{3}\right]$$

$$23 \quad (\sqrt{2}+1)x > 2-\frac{1}{x}; \quad \frac{8}{x+2} \geq \frac{x+2}{x}. \quad [x > 0; -2 < x < 0 \vee x = 2]$$

$$24 \quad 9+\frac{367}{x^2-x}+\frac{3}{x-1} < 0; \quad \frac{x}{x+3}-\frac{1}{4} < \frac{x-1}{2x}. \quad [0 < x < 1; -3 < x < 0 \vee 1 < x < 6]$$

$$25 \quad x-2\sqrt{3} \leq \frac{1-4\sqrt{3}}{x+2\sqrt{3}}. \quad [x < -2\sqrt{3} \vee -2\sqrt{3}+1 \leq x \leq 2\sqrt{3}-1]$$

$$26 \quad \frac{x+2}{x-2}-\frac{2-x}{x+3} > \frac{10}{x(x+1)-6}. \quad \left[x < -3 \vee -\frac{1}{2} < x < 0 \vee x > 2\right]$$

$$27 \quad \frac{x+1}{x^2-4}-\frac{1}{x+2}-\frac{2-x}{x^2+4x+4} \leq 0; \quad \frac{2x-1}{2x^2+x+1}+\frac{x-1}{x+1} > 1. \quad [x < 2 \wedge x \neq -2; x < -1]$$

$$28 \quad \frac{5x}{1-x} < \frac{8}{x-2}. \quad \left[x < \frac{1-\sqrt{41}}{5} \vee 1 < x < \frac{1+\sqrt{41}}{5} \vee x > 2\right]$$

$$29 \quad \frac{x^2-2}{x^3-2x^2+4x-8}+\frac{x+2}{x^2+4} > \frac{1}{x-2}. \quad [-\sqrt{10} < x < 2 \vee x > \sqrt{10}]$$

$$30 \quad \frac{1}{x^2-5x+6}-\frac{x+2}{x-2} \geq \frac{x+3}{x-3}. \quad \left[-\sqrt{\frac{13}{2}} \leq x < 2 \vee \sqrt{\frac{13}{2}} \leq x < 3\right]$$

$$31 \quad \frac{2x}{3x-1}-\frac{3-x^2}{9x^2-6x+1} < 1. \quad \left[x \neq \frac{1}{3}\right]$$

$$32 \quad \frac{x(x+1)+4}{2x^2-3x-2}-\frac{x-1}{2x+1} > \frac{x+3}{x-2}. \quad \left[-1 < x < 2 \wedge x \neq -\frac{1}{2}\right]$$

$$33 \quad \frac{x+2}{2x+1}+\frac{x-2}{x-1} \leq \frac{x^2}{1+x-2x^2}. \quad \left[\frac{1-\sqrt{17}}{4} \leq x < -\frac{1}{2} \vee 1 < x \leq \frac{1+\sqrt{17}}{4}\right]$$

$$34 \quad \frac{2x+5}{1-4x^2}-\frac{x+2}{4x^2-4x+1} \leq \frac{3}{2x+1}. \quad \left[-\frac{1}{2} < x \leq -\frac{1}{18} \vee \left(x \geq 0 \wedge x \neq \frac{1}{2}\right)\right]$$

$$35 \quad \frac{x^2-3}{x^2+3}-\frac{x^2+3}{x^2-3} > 0. \quad [-\sqrt{3} < x < \sqrt{3} \wedge x \neq 0]$$

$$36 \quad \frac{\sqrt{2}}{x}-1 > \frac{1}{1+\frac{\sqrt{2}}{x}}. \quad [-\sqrt{2} < x < -1 \vee 0 < x < 1]$$