

ESERCIZI PROPOSTI**DISEQUAZIONI DI SECONDO GRADO** fratte

Risolvere le seguenti disequazioni di secondo grado fratte

$$1 \quad \frac{x^2 - 4x + 3}{4 - 7x} \geq 0 \quad x < \frac{4}{7} \vee 1 \leq x \leq 3$$

$$2 \quad \frac{x^2 - x - 2}{-3x^2 + 3x + 18} \leq 0 \quad x < -2 \vee -1 \leq x \leq 2 \vee x > 3$$

$$3 \quad \frac{(x^2 - 1)}{(x - 2)} > 0 \quad -1 < x < 1 \vee x > 2$$

$$4 \quad \frac{x^2 - 4x + 3}{x + 5} < 0 \quad x < -5 \vee 1 < x < 3$$

$$5 \quad \frac{-x^2 + 4x - 3}{x + 5} > 0 \quad (-\infty; -5) \cup (1; 3)$$

$$6 \quad \frac{x^2 - 8x + 15}{x^2 + 3x + 2} > 0 \quad (-\infty; -2) \cup (-1; 3) \cup (5; +\infty)$$

$$7 \quad \frac{4 - x^2 + 3x}{x^2 - x} > 0 \quad -1 < x < 0 \vee 1 < x < 4$$

$$8 \quad \frac{4 - x^2 + 3x}{x^2 - x} > 0 \quad (-2; 2)$$

$$9 \quad \frac{x^2 - 2x}{5 - x^2} > 0 \quad -\sqrt{5} < x < 0 \vee 2 < x < \sqrt{5}$$

$$10 \quad \frac{4x + 7}{3x^2 - x - 2} < 0 \quad S = \emptyset$$

$$11 \quad \frac{9 - x^2}{2x^2 - x - 15} > 0 \quad (-3; -\frac{5}{2})$$

$$12 \quad \frac{-x^2 - 4x - 3}{6x - x^2} > 0 \quad (-\infty; -3) \cup (-1; 0) \cup (6; +\infty)$$

$$13 \quad \frac{-3}{-x^2 - 4x - 8} > 0 \quad S = \mathbb{R}$$

$$14 \quad \frac{4 - 2x}{x^2 - 2x - 8} > 0 \quad x < -2 \vee 2 < x < 4$$

$$15 \quad \frac{5 + 2x}{-2x^2 + 14x + 16} < 0 \quad -\frac{5}{2} < x < -1 \vee x > 8$$

$$16 \quad \frac{x^2 - 4x + 3}{5 - 10x} > 0 \quad x < \frac{1}{2} \vee 1 < x < 3$$

$$17 \quad \frac{x^2 + 4x + 3}{3x - 6} > 0 \quad -3 < x < -1 \vee x > 2$$

$$18 \quad \frac{x^2 + 3x + 10}{4 - x^2} > 0 \quad (-2; 2)$$

$$19 \quad \frac{x^2 - 3x + 2}{4x - x^2 - 5} > 0 \quad (1; 2)$$

$$20 \quad \frac{5 - x}{x^2 - 4x + 3} > 0 \quad x < -\frac{3}{4} \vee 1 < x < 4$$

$$21 \quad \frac{x^2 - 5x + 6}{-3x + 7} < 0 \quad S = \left\{ x \in \mathbb{R} \mid 2 < x < \frac{7}{3} \vee x > 3 \right\}$$

$$22 \quad \frac{-x^2 + 2x + 8}{-x - 1} < 0 \quad (-\infty; -2) \cup (-1; 4)$$