

Frazioni Algebriche

SIMULAZIONE

2° BIENNIO Classico

Semplifica le seguenti espressioni:

soluzione:

$$1) \frac{\frac{1}{x-2}}{1-\frac{1}{x-2}}$$

$$\frac{1}{x-3}$$

$$2) \left(\frac{1}{x+1} + \frac{1}{x-1} \right) \cdot \frac{2(x^2-1)}{2x}$$

$$2$$

$$3) \left(\frac{3}{x^2-6x+9} - \frac{1}{x-3} \right)^2 : \frac{x^2-12x+36}{x^2-9}$$

$$\frac{x+3}{(x-3)^3}$$

$$4) \left[\frac{1}{(a-b)^2} \cdot \left(\frac{1}{b^2} - \frac{1}{a^2} \right) - \frac{a-b}{ab(a+b)^2} \cdot \left(\frac{1}{a} + \frac{1}{b} \right) \right] : \frac{2ab}{b^2-a^2}$$

$$\frac{-2}{a^2b^2}$$

$$5) \left(\frac{4x-2y}{3x-3y} - \frac{x+3y}{2x+2y} + \frac{2xy}{x^2-y^2} \right) : \frac{x^2+xy}{xy-y^2} \cdot \frac{36x^3}{35}$$

$$\frac{6}{7}x^2y$$