

③

$$\frac{x}{x-3} - \frac{1}{x} = 1 \quad | \cdot x(x-3)$$

$$x-3 \neq 0$$

$$\text{und } x \neq 0$$

$$\underline{x \neq 3}$$

↳

$$x^2 - x + 3 = x(x-3) \quad | :$$

$$x^2 - x + 3 = x^2 - 3x$$

$$2x + 3 = 0 \quad | :2$$

$$\underline{x = -\frac{3}{2}} \quad | :2$$