

# Pre test - 3/11/2022

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**Exercise 0.1.** Draw the circle  $\gamma : x^2 + y^2 + 4x - 6y + 12 = 0$ .

**Exercise 0.2.** Solve the systems of equations

$$\begin{cases} x^2 + y^2 + 4x - 6y + 12 = 0 \\ x - y = 0 \end{cases}$$

**Exercise 0.3.** Solve the systems of equations

$$\begin{cases} x - y + 2z = 1 \\ 3x - 2y - z = 2 \\ x + y + \sqrt{2}z = 3 \end{cases}$$

**Exercise 0.4.** Draw the parabola for  $A : (0, 0), B : (1, 1), A : (-1, 4)$ .