

# SISTEMES D'EQUATIONS NON LINEAUX

~~$$1) \begin{cases} x^2 + y^2 = 290 \\ x + y = 40 \end{cases}$$

Sol: (13, 11) ; (11, 13)~~

$$6) \begin{cases} 2x^2 + 3y^2 = 32 \\ -3x^2 + 4y^2 = -48 \end{cases}$$

Sol: (4, 0) ; (-4, 0)

$$2) \begin{cases} x - 2y^2 = 0 \\ y + 5 = 3x \end{cases}$$

Sol: (2, 1) ;  $(\frac{25}{18}, -\frac{5}{6})$

$$7) \begin{cases} x + y = 6 \\ xy = 9 \end{cases}$$

Sol: (3, 3)

$$3) \begin{cases} 2x^2 - y^2 = -1 \\ x^2 + 2y^2 = 22 \end{cases}$$

Sol: (2, 3) ; (-2, 3) ; (-2, 3) ; (-2, -3)

$$8) \begin{cases} x - y + 3 = 0 \\ x^2 + y^2 = 5 \end{cases}$$

Sol: (-1, 2) ; (-2, 1)

$$4) \begin{cases} \frac{1}{x} + \frac{1}{y} = \frac{5}{6} \\ xy = 6 \end{cases}$$

Sol: (2, 3) ; (3, 2)

$$9) \begin{cases} x + y = 0 \\ xy = 1 \end{cases}$$

no sol.

$$5) \begin{cases} 2x - y = 3 \\ x^2 - y^2 = 3 \end{cases}$$

Sol: (2, 1)

$$10) \begin{cases} x^2 + y^2 = 61 \\ xy = 30 \end{cases}$$

Sol: (6, 5) ; (-6, 5) ; (5, 6) ; (-5, -6)