

QUADRATIC SYSTEMS

Solve the following systems:

1.
$$\begin{aligned} 2x^2 + 5y^2 &= 98 \\ 2x^2 - y^2 &= 2 \end{aligned}$$

2.
$$\begin{aligned} x^2 + y^2 &= 25 \\ x^2 - y &= 5 \end{aligned}$$

3.
$$\begin{aligned} x^2 + 2y^2 &= 33 \\ x^2 + y^2 + 2x &= 19 \end{aligned}$$

4.
$$\begin{aligned} x^2 + y^2 + 8x &= -15 \\ 9x^2 + 25y^2 &= 225 \end{aligned}$$

5.
$$\begin{aligned} 5x^2 + 9y^2 &= 161 \\ x^2 - 4y &= 4 \end{aligned}$$

6.
$$\begin{aligned} 16x^2 - 3y^2 &= -11 \\ 8x - y &= -11 \end{aligned}$$

7.
$$\begin{aligned} x^2 + 9y^2 - 10x + 36y &= 20 \\ x - 3y &= 2 \end{aligned}$$

8.
$$\begin{aligned} x^2 + 2y^2 &= 33 \\ 3x + 2y &= -11 \end{aligned}$$