

Clasificar las siguientes cónicas dando sus elementos (centro, vértices, focos, ejes, rectas directrices, ...).

1. $2x^2 - xy + 2y^2 + 5x - 2y + 2 = 0$

2. $x^2 - 2xy + y^2 + 4x - 6y + 1 = 0$

3. $x^2 - 4xy + y^2 + 8x - 8y + 8 = 0$

4. $x^2 + 3xy + 2y^2 + 2x + 5y - 3 = 0$

5. $x^2 - 4xy + 4y^2 + 6x - 12y + 5 = 0$

6. $3x^2 - 2xy + 3y^2 + 2x - 4y + 2 = 0$

7. $2x^2 + y^2 - 4y + 4 = 0$

8. $x^2 + 4xy + 4y^2 - 2x - 4y + 1 = 0$

9. $4x^2 - 4xy + y^2 + 8x - 4y + 5 = 0$

10. $3x^2 - 2xy + 3y^2 + 2x - 4y + 1 = 0$

11. $x^2 + 2xy - y^2 - 6x + 4y - 3 = 0$

12. $x^2 + 4xy + 4y^2 - 2x - 4y - 3 = 0$

13. $x^2 + y^2 + 2x + 1 = 0$

14. $x^2 + 4xy + 4y^2 + 2x + 4y + 2 = 0$

15. $x^2 + 2xy - y^2 - 6x + 4y = 0$

16. $x^2 + 4xy + 4y^2 - 5 = 0$