

<3 Classifying Conics

Classify each conic section.

1) $x^2 + y^2 - 2x - 6y - 3 = 0$

2) $64x^2 + 36y^2 + 448x - 108y + 289 = 0$

3) $x^2 + 12x + 2y + 28 = 0$

4) $2y^2 + x - 12y + 18 = 0$

5) $-25x^2 + 4y^2 - 100x - 200 = 0$

6) $x^2 + y^2 - 4x - 2y - 11 = 0$

7) $16x^2 + y^2 + 128x + 4y + 244 = 0$

8) $25x^2 - 16y^2 + 50x - 375 = 0$

Classify each conic section and write its equation in standard form.

9) $x^2 + 10x + 4y + 37 = 0$

10) $x^2 + y^2 + 2x - 4y - 3 = 0$