

A2H: Classifying Conic Sections

Classify as a parabola, circle, ellipse, or hyperbola.

1) $x^2 + y^2 - 6x + 4y + 9 = 0$ _____

2) $x^2 + 4y^2 - 6x + 16y + 21 = 0$ _____

3) $4x^2 - y^2 - 4x - 3 = 0$ _____

4) $y^2 - 4y - 4x = 0$ _____

5) $4x^2 + 3y^2 + 8x - 24y + 51 = 0$ _____

6) $4y^2 - 2x^2 - 4y - 8x - 15 = 0$ _____

7) $25x^2 - 10x - 200y - 119 = 0$ _____

8) $4x^2 + 4y^2 - 16y + 15 = 0$ _____

9) $4x^2 - y^2 + 8x - 6y + 4 = 0$ _____

10) $2x^2 + 2y^2 - 8x + 12y + 2 = 0$ _____

Answers

1) Circle

2) Ellipse

3) Hyperbola

4) Parabola

5) Ellipse

6) Hyperbola

7) Parabola

8) Circle

9) Hyperbola

10) Circle