

For each of the conics:

a. Identify class/type, b. write in standard form, and c. identify vertex/center and position. That is which way does it open or which direction does the major axis or the transverse axis lie.

1.  $4x^2 + 32x + y^2 - 2y + 29 = 0$

Class/type:

Standard Equation:

Vertex/center and Direction:

2.  $9x^2 - 25y^2 + 36x + 50y - 214 = 0$

Class/type:

Standard Equation:

Vertex/center and Direction:

3.  $y^2 - 2y - 8x + 17 = 0$

Class/type:

Standard Equation:

Vertex/center and Direction: