Problem: Classify the type of conic curves given by quadratic equations. Find its center or vertex, and their axes:

1. $4x^2 + 10xy + 4y^2 - 2x + 2y + 18 = 0$.

2. $8x^2 + 2y^2 + 8xy - 6x - 8y + 1 = 0$

3. $5x^2 + 4xy + 2y^2 - 24x - 12y + 18 = 0$.