Find the inclination of each of the following lines. Show your work. Your answer must be greater than or equal to 0° but less than 180°. Where appropriate, round to the nearest tenth of a degree.

1. $5x - 2y = 4$

2. $3x + 4y = 8$

Find an angle between the two given lines. Show your work. Your answer must be greater than 0° but less than or equal to 90°. Where appropriate, round to the nearest tenth of a degree.

3. $4x - 3y = 12$
     $x + 4y = 8$

4. $5x + 2y = 10$
     $2x - 5y = 20$

Find the distance from the given point to the given line. Where appropriate, round your answer to three significant figures.
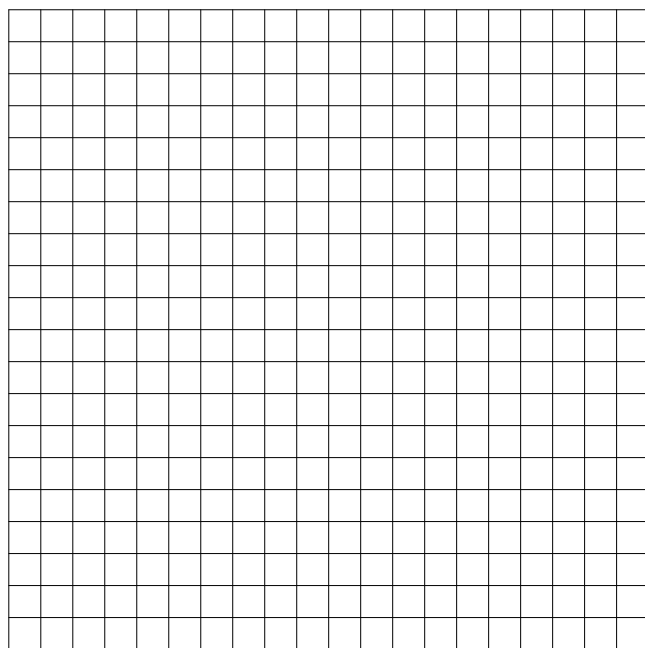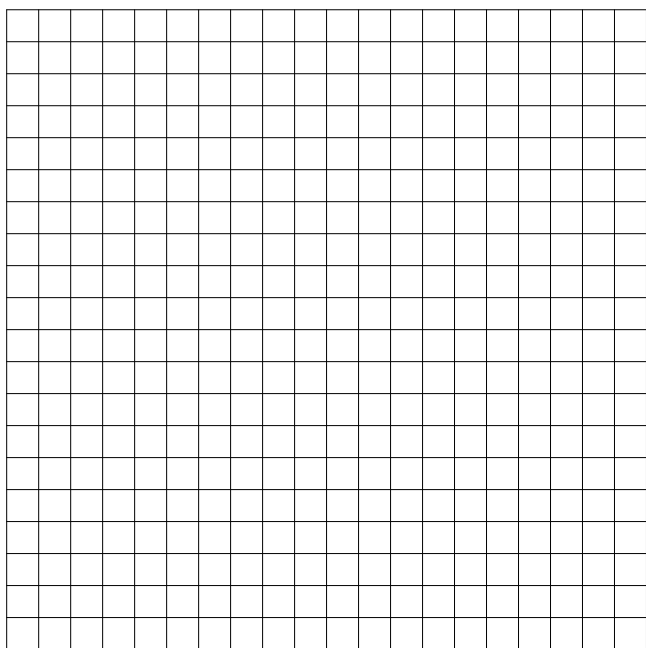
5. $(1, 4)$; $2x + 3y + 6 = 0$

6. $(-1, 5)$; $4x - 3y - 6 = 0$

Identify each equation as that of a circle, ellipse, hyperbola, or parabola. Express the equation in standard form and sketch its graph. Show your work neatly organized.

7. $x^2 + 4y^2 + 4x - 24y + 4 = 0$
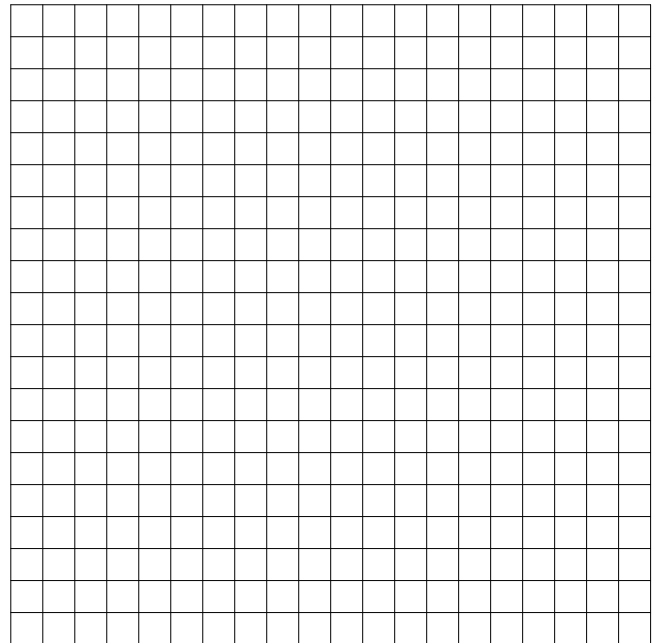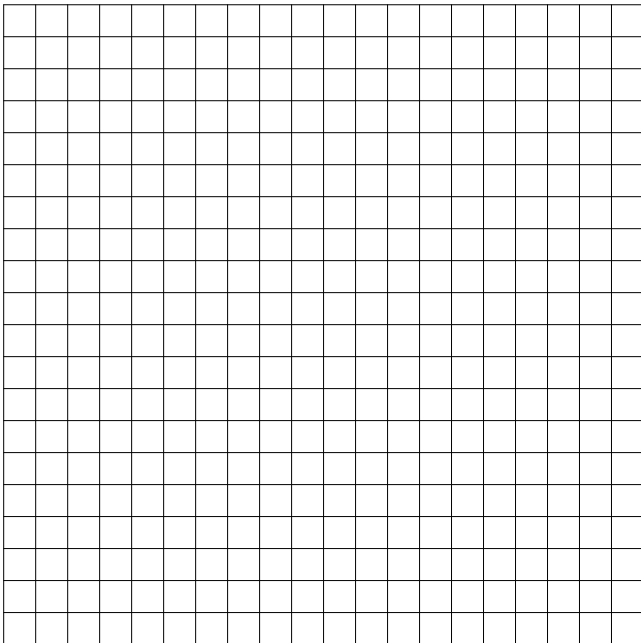
8. $x^2 - 6x - 2y + 17 = 0$

Identify each equation as that of a circle, ellipse, hyperbola, or parabola. Express the equation in standard form and sketch its graph. Show your work neatly organized.

9. $9x^2 - 4y^2 + 54x + 16y + 29 = 0$

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

**Identify each equation as that of an ellipse, a hyperbola, or a parabola.
Explain how you got your answer.**

11. $3x^2 + 2xy + 2y^2 - 3x + 7y + 5 = 0$

12. $x^2 + 6xy + 9y^2 - 2y + 1 = 0$

13. $xy + 6 = 0$

14. $2x^2 + 3xy + y^2 + 4x + 6y - 10 = 0$