**UNIT 5/ DAY 6 ASSIGNMENT** Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(Applications of Completing the Square)

Part 1: Write the quadratic in vertex form. Find the vertex, focus, and directrix for the quadratic.

1. y = 2x2 – 6x – 1
2. y = x2 + 4x – 7

Part 2: Write the circle equation in standard form. Find the center and the radius of each circle.

1. x2 + y2 – 6x – 2y = 4
2. x2 + y2 – 4y – 16 = 0