EXTRA REVIEW Quiz 2.1

**Directions:** Show all work in order to receive full credit.

1. Determine the center and the radius of $x²+y²+10x-4y+25=0.$
2. Convert the following quadratic into vertex form: $y=x²+6x+7$.
3. Given a parabola with focus (1, 4) and directrix $y=7$, write the equation of the parabola in standard form.
4. Factor the expression completely: $64x^{8}-y^{12}$
5. Solve $2x^{2}+8x+12=0$ by completing the square and express the result in simplest $a+bi$ form.
6. Factor completely: $2x³-6x^{2}-x+3$