Name: _____

Show all your work and simplify your answers unless otherwise specified. If you do not turn in a rewrite within a week (or after the fifth attempt), your score will be solidified.

1. Consider $f(x) = \frac{2x+1}{x-3}$. This function is one-to-one, so it has an inverse. Find $f^{-1}(x)$.

2. Determine the center and radius of the circle described by the equation

$$x^2 + y^2 - x + 2y - 2 = 0.$$