Optional problem set III, 506 Spring 2009
(will not be "officially" graded but feel free to turn in if you would like for your work to be checked)

Let k be a field.

Problem 1. Describe irreducible components of the following algebraic sets in $\mathbb{A}^3$:

(1) $V((f, g, h))$ where $f = y^2 - xz, g = x^4 - yz, h = z^2 - x^3y$.

(2) $V((xz - y^2, z^3 - x^5))$