The Chevalley-Warning theorems are a collection of results that give lower bounds for the number of solutions to systems of equations over finite fields. In particular, for a system of equations over a finite field, $\mathbb{F}_q$ where $\text{char}(\mathbb{F}_q) = p$, if the number of variables is strictly greater than the sum of the degrees of the equations, then the number of solutions is congruent to 0 mod $p$. These bounds are best possible, as shown by simple cases. In 2011, D. R. Heath-Brown gave improvements to these results by excluding these simple cases. I have improved some of Heath-Brown’s results in this area. Some of these improvements have resulted in best possible bounds. In this talk, I will briefly introduce the classical Chevalley-Warning theorems and then discuss my results. (Received September 16, 2019)