ELEMENTARY NUMBER THEORY

HOMEWORK 6

(1) Compute $h(-23)$.
(2) Compute $h(-52)$.
(3) Reduce the form $(15, 40, 27)$.
(4) Reduce the form $(101, 20, 1)$.
(5) Consider the form $Q = (1, 0, 13)$. Show that if $p$ is a prime $\neq 13$ represented by $Q$, then $\left(\frac{-13}{p}\right) = +1$ and $p \equiv 1 \mod 4$. 