(Debug)
$$ln[*]:= hmt1 = 34.6 - .5 q^{2};$$
 $n1 = 1411;$
 $n2 = 3411;$

$$hmt2 = \frac{hmt1}{\left(\frac{n1}{n2}\right)^{2}};$$
Expand [hmt2]

(Debug) Out[*]= $202.202 - 2.92199 q^2$