TYPE YOUR NAME HERE
HW 13: 3.4, 3.5, 3.7
M328K
March 8th, 2012

3.4 Question. *Using paper and pencil, but no calculator, can you find the natural number k, $0 \leq k \leq 11$, such that $39^{453} \equiv k \pmod{12}$.*

Solution. Type your solution here! $\square$

3.5 Exercise. *Show that 39 divides $17^{48} - 5^{24}$.*

Solution. Type your solution here! $\square$

3.7 Question. *Let $f(x) = 13x^{49} - 27x^{27} + x^{14} - 6$. Is it true that*

$$f(98) \equiv f(-100) \pmod{99}?$$

Solution. Type your solution here! $\square$