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Arnold M. Adelberg* (adelbe@math.grinnell.edu), Dept. of Mathematics & Computer Science, Science 2405, Grinnell College, Grinnell, IA 50112. *Extension of Universal Kummer Congruences.*

Let c_1, c_2, \dots be indeterminates, let $F(t) = t + c_1 t^2/2 + c_2 t^3/3 + \dots$, and let $G(t) = F^{-1}(t)$ be the compositional inverse. The *universal Bernoulli* numbers $\hat{B}_n \in \mathbf{Q}[c_1, c_2, \dots]$ are defined by $\hat{B}_n = [t^n/n!]t/G(t)$. If p is prime, Francis Clarke proved that $\hat{B}_n/n \in \mathbf{Z}_p[c_1, c_2, \dots]$ if and only if $p - 1 \nmid n$. We proved a Kummer congruence for the universal Bernoulli numbers if $n \not\equiv 0, 1 \pmod{p - 1}$ (JNT, to appear). We now have an extension for $n \equiv 1 \pmod{p - 1}$, with a simplified proof that contains all congruences. (Received September 19, 2000)