

Ben Franklin's 307th Birthday Possesses a Unique Numerical Property

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Ben Franklin's 307th birthday January 17, 2013 possesses a unique numerical property. Why? Number 307 can be expressed as sum of consecutive powers of number seventeen as $17^2 + 17^1 + 17^0$. Note that number 17 holds a special place in Franklin's life since it pops up repeatedly in his biography [1]. This property won't repeat until year 6926 which will mark Franklin's 5220th birthday where 5220 equals $17^3 + 17^2 + 17^1 + 17^0$. Also, the powers of 17 that add up to 307 put side by side yield 210 and interestingly enough, the prime factors of 210 add up to 17!

[1] A. S. Inan, "More 17's in Ben Franklin's Life," *Franklin Gazette*, Vol. 21, No. 2, pp. 7-8, Summer 2011.

