

Re: Why is 12345678, 85263147, etc. always divisible by 9?

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- *From:* Dave Seaman <dseaman@xxxxxxxxxxxx>
  - *Date:* Mon, 20 Feb 2006 02:00:42 +0000 (UTC)
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On 19 Feb 2006 11:34:19 -0800, bill wrote:

Ignacio Larrosa Cañestro wrote:

En el  
mensaje:1140357815.354141.312390@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx,  
TonyVarden <TonyVarden@xxxxxx> escribió:

You can arrange the digits from 1 to 8 in any combination &  
the  
resulting number will always be divisible by 9.

ex:  
 $12345678 / 9 = 1371742$   
 $85263147 / 9 = 9473683$   
etc.  
Why?

Don't know the divisibility rule fby 9?

A number is divisible by 9 iif the sum of its digits (in base 10) is  
multiple of 9.

But why? If the sum of the digits is a multiple of 7, the number is  
not necessarily divisible by 7.

It is, if you are working in base 8.

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Dave Seaman  
U.S. Court of Appeals to review three issues  
concerning case of Mumia Abu-Jamal.  
<<http://www.mumia2000.org/>>

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