

# Today in Math History...

*-Sometime in August, 1654*

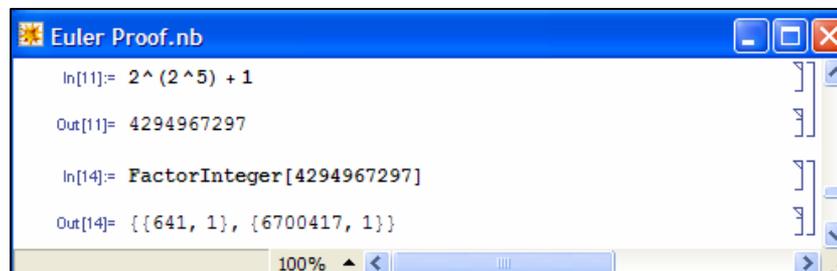
Fermat wrote Pascal that numbers of the form:

$$2^{2^n} + 1$$

are **always prime**, adding “the proof of it is very difficult and I assure you that I have not yet been able to find

it fully.” A century

later Euler showed that  $2^{2^5} + 1$  is **composite**.



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Euler Proof.nb
In[11]:= 2^(2^5) + 1
Out[11]= 4294967297
In[14]:= FactorInteger[4294967297]
Out[14]= {{641, 1}, {6700417, 1}}
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