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*On Certain Combinations of Higher Powers of Fibonacci Numbers*,  
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**Abstract**

We present identities that we feel can be regarded as higher order analogues of the well-known identity  $F_n^2 + F_{n+1}^2 = F_{2n+1}$ . We give three theorems corresponding to the powers 4, 6, and 8. We also state two conjectures that give the form of similar identities that involve higher powers.