$\qquad$
Do Now: Below are 7 numbers of a sequence. Look closely for the pattern.

$$
1,1,2,3,5,8,13, \ldots, \ldots, \ldots
$$

What is the pattern for getting each successive (ie. next) term? And what will the 8th, 9th, and 10 th numbers be?

The pattern above is called the $\qquad$ . It is named after the Italian mathematician $\qquad$ .

In the left-hand column of the table below, find the first 13 terms of the sequence. Then compute the ration of each current term to the previous term.

|  | Ratio of current term over the previous term | Decimal value of the ratio (rounded to 4 decimal places) |
| :---: | :---: | :---: |
| 1 | -------- | --------- |
| 1 | $\frac{\text { current term }}{\text { previous term }}=\frac{1}{1}$ | 1 |
| 2 | $\frac{\text { current term }}{\text { previous term }}=\frac{2}{1}$ | 1 |
| 3 | $\frac{\text { current term }}{\text { previous term }}=$ |  |
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