

The golden ratio is a special number like  $\pi$ . It is about 1.6 and we also give it a Greek letter –  $\phi$  (phi pronounced "fee")

It is the relationship of the sides of a super awesome rectangle called the "Golden Rectangle." See that picture above.

## What's this got to do with Fibonacci?

Turns out, as the sequence of Fibonacci numbers get bigger and bigger, each two numbers divide and become something awfully close to  $\varphi$ !

| Fibonacci | Each number divided by     |
|-----------|----------------------------|
| Numbers   | the previous one           |
| 1         |                            |
| 1         | 1÷1= 1                     |
| 2         | 2÷1= 2                     |
| 3         | 3÷2= 1.5                   |
| 5         | 5÷3= 1.666666667           |
| 8         | 8÷5= 1.6                   |
| 13        | 13÷8= 1.625                |
| 21        | 21÷13= 1.615384615         |
| 34        | $34 \div 21 = 1.619047619$ |
| 55        | 55÷34= 1.617647059         |
| 89        | 89÷55= 1.618181818         |
| 144       | 144÷89= 1.617977528        |
| 233       | 233÷144= 1.618055556       |
| 377       | 377÷233= 1.618025751       |
| 610       | 610÷377= 1.618037135       |
| 987       | 987÷610= 1.618032787       |