

Fibonacci Numbers

The Fibonacci sequence starts 1, 1, ...

Add these two numbers together to get the third number in the sequence **2**.

Add your answer to the second term to get the fourth number in the sequence **3**.

Keep following the pattern (adding the previous two terms) to find the first twelve terms of the Fibonacci sequence.

1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144

Hint: If you have found each term correctly, the thirteenth term should be 233.

Complete each of the following sums on a calculator giving your answers to 3 decimal places. What do you notice?

$$2^{\text{nd}} \text{ term} \div 1^{\text{st}} \text{ term} = 1$$

$$3^{\text{rd}} \text{ term} \div 2^{\text{nd}} \text{ term} = 2$$

$$4^{\text{th}} \text{ term} \div 3^{\text{rd}} \text{ term} = 1.5$$

$$5^{\text{th}} \text{ term} \div 4^{\text{th}} \text{ term} = 1.667$$

$$6^{\text{th}} \text{ term} \div 5^{\text{th}} \text{ term} = 1.6$$

$$7^{\text{th}} \text{ term} \div 6^{\text{th}} \text{ term} = 1.625$$

$$8^{\text{th}} \text{ term} \div 7^{\text{th}} \text{ term} = 1.615$$

$$9^{\text{th}} \text{ term} \div 8^{\text{th}} \text{ term} = 1.619$$

$$10^{\text{th}} \text{ term} \div 9^{\text{th}} \text{ term} = 1.618$$

$$11^{\text{th}} \text{ term} \div 10^{\text{th}} \text{ term} = 1.618$$

$$12^{\text{th}} \text{ term} \div 11^{\text{th}} \text{ term} = 1.618$$

