

By selecting a video and an article, you will have to explain what the Golden Ratio is.

You can choose some illustrations to help understand.

VIDEO: \_\_\_\_\_

List 5 words from this video, add their definition:

1/

2/

3/

4/

5/

<https://www.insider.com/fibonacci-sequence-helps-with-miles-and-km-conversions-2017-9?amp>

Article: what are  
the practical applications  
of Fibonacci numbers?

$$F(n) = 1,618 \cdot F(n-1)$$

milk and honey ratio = 1,609

the Fibonacci is sequence  
of a series of numbers,

1, 1, 2, 3, 5, 8, 13, 21, 34, 54

How does it work,  $a + b = c$

Fibonacci's number series  
imitates the ratio between  
miles and kilometres

5 miles roughly equal to

8 km

13 miles  $\rightarrow$  21 km

This occurs bc the golden ratio very closely matches the ratio between miles & kilometres

1<sup>st</sup> quirk: an unusual thing (habit, behavior), something strange and unexpected

2<sup>nd</sup> imperial system: system of measurement in use in the UK and other Commonwealth countries

3x invariably : always

4x vice-versa : used to say  
that what you have just said is  
also true in the opposite order  
(he doesn't trust her, and vice versa)

5x particularly : especially,  
more than usual

$$15 \text{ km} = 13 \text{ km} + 2 \text{ km}$$

$$13 \text{ km} \rightarrow 8 \text{ mile}$$

$$2 \text{ km} \rightarrow 1 \text{ mile}$$

$$15 \text{ km} \rightarrow 8 + 1 = 9 \text{ mile}$$

Ex 170 km

$$170 \text{ km} = 10^2 \cdot 17 \text{ km}$$

$$17 \text{ km} = 13 \text{ km} + 2 \text{ km} + 2 \text{ km}$$

$$= 8 + 1 + 1$$

$$= 10 \text{ miles (approximately)}$$

$$170 \text{ km} = 10^2 \cdot 10 \text{ miles} = 100 \text{ miles}$$

as we move toward bigger numbers in Fibonacci series, the consecutive number grows as:

$$\Rightarrow F(n) = 1, 618^{\phi} F(n-1)$$