

Navigating a Calculator and the Golden Ratio



Equals Symbol

Using a calculator

Can you identify the buttons circled above? The first is done for you. Try and identify as many as you can, but don't worry if you can't name them all.

Calculator words

Calculators can make words as well as numbers. Turn it upside-down to read the answers to these calculations!

1. $31 \times 7 =$

2. $3859 \times 2 =$

3. $1929 \times 4 =$

4. $179 \times 3 =$

5. $1911 \times 3 =$

6. $49612 + 5766 =$

7. $3651 + 1986 =$

8. $29611 + 8207 =$

9. $0.0123 + 0.0668 =$

10. $5632 + 2082 =$

11. $66666 + 10679 =$

12. $0.8968 - 0.1234 =$

The Golden Prediction

Follow the steps closely and compare your answers with other people trying the same task:

1. Number the first 25 lines on a piece of lined paper, (1,2,3,...)
2. Write any 2 whole numbers on the first 2 lines
3. Add the two numbers and write their sum on the third line
4. Add the last two numbers and write their sum on the next line
5. Continue this process (add the last two, write the sum), until you have 25 numbers on your list
6. Select any number among the last 5. Now divide it by the number above it

Here is the magic

7. Write your answer. Compare it with the answer other people get. What do you notice?
8. You all chose different starting numbers and therefore divided different numbers in step 6 above. How cool is that??!!

Extension

9. Try dividing by the next number in the list rather than the one above. Now what do you notice?
10. Research the 'Golden Ratio', and make a poster (A4) size.