

Interview Questions

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Question 1) Why silver ratio falls under irrational numbers?

Answer 1) Two quantities in a silver ratio are with the ratio of the sum of the smaller and twice the larger of those quantities, to the larger quantity, is the same as the ratio of the larger one to the smaller one. Hence, it's an irrational constant.

Question 2) So, in real world where you can use silver ratio?

Answer 2) It is used in various architectures and design concepts. Design of Buddha Statues or various Anime characters could be an example of its usage.

Question 3) Silver ratio is the analogous continued fraction with all coefficients equal to 1 or 2?

Answer 3) It seems to be twice of the golden ratio, but coefficients contribution is in a non linear way, which actual equals to $1+\sqrt{2}$. So, mostly 2.

Question 4) Do you think silver ratio is derived from golden ratio? If yes then how?

Answer 4) I think yes because the interpretation of golden ratio is very similar but with all it's coefficients being 1.

Question 5) People of which country more often use silver ratio?

A) USA B) India C) China D) Japan

Answer 5) I think Japan because of it's architecture.

Question 6) Silver ratio can be used with which constants?

Answer 6) Being a ratio, I am not sure if it requires a constant to handle itself.

Question 7) Silver ratio is second worst case of which theorem?

Answer 7) I am not sure, but I think It is derived from Hurwitz's theorem.

Question 8) Silver ratio has relationship with which sequence?

Answer 8) I think silver ratio has relationship with Pell Sequence.

Question 9) How? Can you elaborate?

Answer 9) As Pell sequence starts with 0, 1, 2, 5, 12, 29.... The nth term is the sum of the (n-2)th term and 2 times the (n-1)th term.

Question 10) Silver ratio is connected to which geometric shape?

Answer 10) A rectangle. A "silver rectangle" can be cut into two squares and another silver rectangle. The ratio of the side lengths is $1+\sqrt{2}$, about 2.414.

Analysis of the interview:

As this interview was blend of open and closed questions. All questions were closed questions except question 9 which depends on the answer of previous one. In that answer explanation was required that how silver ratio has relationship with Pell sequence. Furthermore, all questions were answered properly and wherever required explanation has justified the solution.