

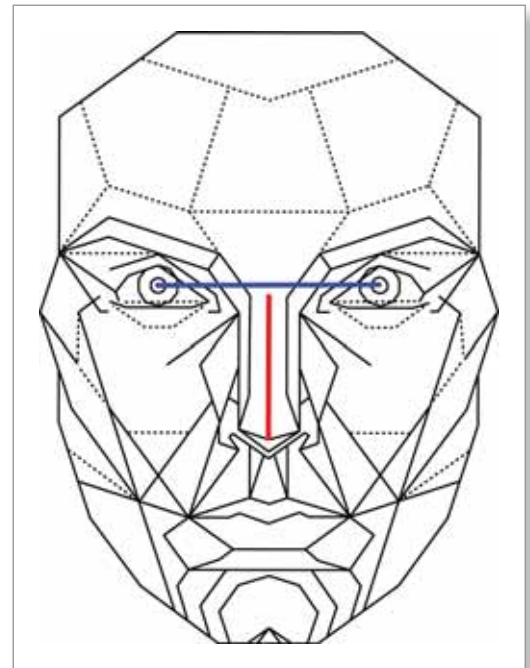
Golden Rectangle In Exercises 7–10, determine whether the golden ratio applies to the object. (See Example 4.)



Beauty In Exercises 11–14, use the information below. (See Example 4.)

Since ancient Greece, symmetry and the golden ratio often have been thought to embody ideal beauty. Dr. Stephen Marquardt has studied human beauty for years across both genders and for all races, cultures, and eras. Through his research, he developed and patented the RF Mask, which he claims is the most beautiful shape for a human face.

11. Use the Internet to describe why Dr. Marquardt believes that the RF Mask models the perfect human face.
12. Compare the distance between the pupils to the length of the nose on the RF Mask. What do you notice?



13. The RF Mask is applied to the face of the Egyptian queen Nefertiti (14th century B.C.). According to the RF Mask, is Nefertiti beautiful? Explain.
14. It is common for humans to find or see patterns in everything they do. Do you think the golden ratio is a law of nature or just a coincidental pattern detected by humans? Explain your reasoning.