Quiz #10 (Form A)   KEY
ANSWERS ARE IN BOLD ITALICS.
1) Which number is next in the Fibonacci sequence of numbers: 1, 1, 2, 3, 5, 8, 13, 21 . .
a) 55   ***b) 34***   c) 8   d) 1.62

2) Which of the following is NOT an example of Fibonacci numbers found in nature?
   a) spirals on a sunflower
   b) pinecone spirals
   c) the number of petals on a daisy
   d) a mountain range

3) What is the 10th number in the Fibonacci Sequence?
   a) 34   ***b) 55***   c) 8   d) 1.62

4) What is one way to decide if two numbers follow a Fibonacci sequence?
   a) if their sum is the same as their difference
   b) if their ratio is approximately the golden ration
   c) if each number is prime
   d) if their product is approximately the golden ratio

5) The length of a golden rectangle is approximately 8 cm. Which of the following measures could be the width of the rectangle?
a) 4 cm   b) 10 cm   ***c) 5 cm***   d) 16 cm

6) One side of a golden rectangle is approximately 6 cm. Which of the following is NOT a possible measure for the adjacent side?
a) 10 cm   b) 4 cm   ***c) 5 cm***

7) A fractal is an object
   a) that reveals new features at smaller scales
   b) that is symmetric
   c) that has proportional features
   d) whose length to width ratio is the golden mean

8) Which of the following is NOT an example of fractals?
a) the number of spirals on a pineapple   b) coastlines   c) ferns   d) coral

9) Fractal geometry has applications in
a) voting methods   ***b) imitating nature***
c) finding fleas on a dog   d) learning styles

10) The perimeter of Snowflake Island is:
a) 14 miles   b) equal to 1.62 times its area   ***c) infinite***