You Can Count On It

You are being provided with a book chapter by chapter. I will request you to read the book for me after each chapter. After reading the chapter, 1. shorten the chapter to no less than 300 words and no more than 400 words. 2. Do not change the name, address, or any important nouns in the chapter. 3. Do not translate the original language. 4. Keep the same style as the original chapter, keep it consistent throughout the chapter. Your reply must comply with all four requirements, or it's invalid.
I will provide the chapter now.

YOU CAN COUNT ON IT

? The largest known prime number has 24,862,048 digits when written in base 10. It was "discovered" by Patrick Laroche in 2018.

? The concept of zero seems so simple, but few pre-modern people developed it. The Indians were the first people to develop the zero as a written digit maybe in the 7th century CE but possibly earlier.

? In geometry, a polygon is any shape that has a limited/finite number of straight lines that close together to form the shape. Triangles and squares are polygons, but circles are not because their lines are not straight.

? If you multiple the number nine by any number, and add all the digits of the sum, you'll always get nine. For instance, 127x9=1,143; 1+1+4+3=9. It's true every time!

? The ancient Egyptians and ancient Egyptians had symbols for and used fractions in their math, but they did so without the concept of zero.

? "Combinatorics" refers to any type of counting. Although it sounds simple enough, combinatorics includes probability, finite geometry, and design theory.

? The study known as "game theory" combines math with social science, logic, and computer science. It's generally used to determine what a person's losses or gains will be in a particular scenario.

? The ancient Greek mathematician, Pythagoras (ca. 570-495 BCE), is best known for his theorem - a2+b2=c2 - but he was also a mystic who led a commune.

? "I'll be back in a jiffy" actually refers to time measurement. In computer animation, a jiffy represents 1/100th-of-a-second, while in electronics it's a period of an alternating current power cycle; either 1/60 or 1/50 of a second.

? A "quant" is a person who uses quantitative analysis in financial investing. The investment methods quants use is often called

quantitative investment management.

? Economics is the study of the exchange of goods, services, and commodities. Although you don't have to be a math whiz to be an economist, the study does require some algebra, calculus, and statistics.

? A picture within a picture, etc., is known as the "Droste effect." Theoretically, this could continue infinitely but in practicality, it only continues as long the image can be seen.

? The double-entry system of bookkeeping or accounting is often attributed to the Florentine merchant, Amatino Manucci. His double-entry accounts from 1299-1300 are the earliest on record.

? The opposite sides of traditional dice always add up to seven. You can throw the dice as much as you want, but it's always the case.

? Complex analysis is a type of math that concerns how complex numbers function. Mechanical, electrical, and nuclear engineering all use complex analysis, such as determining how to launch a satellite.

? Did you know that you can always cut through a ham and cheese sandwich so that the remaining halves are exactly the same size? This is called the ham sandwich theorem.

? There are 52 cards in a traditional deck of cards and 52! (Factorial 52) permutations of those cards. That number is …