

8. What does this law state?
9. Explain the meaning of the emphasized words and expressions.
10. Discuss the text together with your groupmates.

3.5. ANTOINE – AUGUSTIN COURNOT (1801 – 1877)



He was the first to draw a **demand curve**. He was the first to present a systematic analysis of monopoly and perfect competition. While Cournot was not the first to apply mathematics to economic theory, his early and **insightful** use of this tool marks him as the founder of the mathematical approach to economics.

Antoine – Augustin Cournot was born in France on August 28, 1801, to a family of **peasant stock**. He was raised by his grandmother, uncle, and two **maiden aunts**.

After completing his secondary education, he worked for four years in a lawyer's office. During this **internship** he learned the legal **intricacies** of the French political system. A copy of Laplace's **Systeme du Monde** sparked in Cournot an interest in mathematics, which **steered** him away from his work at the law office. In 1821, Cournot **enrolled** in the Ecole Normale Superieure in Paris to **pursue** this interest. The following year, however, the university was closed by the government, and many students, including Cournot, were kept under **surveillance** by the French police. Cournot remained in Paris to continue his studies in mathematics. In his free time he offered his services as a mathematic tutor. In 1823, Marshal Gouvin Saint-Cyr, a French military leader, hired Cournot to instruct his young son. Cournot's **diligence** in his duties **earned him favour with** the Marshal, who made Cournot his personal secretary. Cournot **collaborated** in the editing and publishing of Saint-Cyr's **memoirs**.

Cournot had close contact with the military and political leaders who worked with the Marshal and had the potential for a highly successful career among their ranks. However, he continued to study mathematics, earning his doctorate in 1829.

He published eight papers in the **Bulletin des Sciences**, which attracted the attention of Simeon Poisson, the recognized authority in mathematics at the University of Paris. After Cournot left the service of Saint-Cyr in 1833, Poisson **secured a position** for him at the Academy of Paris. Then, in 1835, with Poisson's help, Cournot was appointed Professor of Analysis and Mechanics at the University of Lyon. The administrative skills that had impressed Saint-Cyr also earned the respect of Poisson. One year later, Poisson appointed Cournot Rector of the

Academy at Grenoble, the Cournot's career as a high official in the French University system was set.

Cournot's genius lay in his application of mathematics to the social sciences, especially economics. In 1838, he published a volume small in size but monumental in importance. **Recherches sur les Principes Mathematiques de la Theorie des Richesses**, a mathematical Theory of economics. Cournot himself **predicted** his method would fail to gain the support of economists. He wrote in the preface to *Recherches*, "I intend to apply to [theoretical research] the forms and symbols of mathematical analysis. This is a plan likely, I confess, to draw on me on **the outset the condemnation of theorists of repute.**" Cournot was wrong. His work suffered a fate worse than condemnation: it was ignored. Disappointed by the silence which greeted his work, he turned to other pursuits. He was appointed inspector General of the University of France, a position he held over 10 years.

Disgusted by the government's policies toward the university and **plagued by failing vision**, Cournot retired in 1862 from all public functions and quietly settled in Paris. He died in 1877, just before he could accept the honour of having been elected the member of the Academie des Sciences Morales. Shortly before Cournot's death, Leon Maleas and Stenley Jevons **simultaneously** began work on methods not unlike those of Cournot, which would attract serious attention from economists and establish mathematical economics as a field of study. Both men cited Cournot's influence on their thinking.

In 1933, the Royal econometric Society published the first volume of the journal **Econometrica**. Volume 1, Number 1 was dedicated to Antoine – Augustin Cournot as the founder of mathematical economics.

Task

1. Cournot was the first in many things, wasn't he?
2. What did he learn during his internship?
3. What sparked his interest in mathematics and where did he pursue this interest?
4. What happened in the following year?
5. What could change his life in 1823?
6. How did Simeon Poisson influence his life?
7. In what sciences did Cournot apply mathematics?
8. What was he afraid of?
9. How was his book met by the theorists of repute?
10. Who followed his teaching?
11. Explain the meaning of the emphasized words and expressions.
12. Discuss the text together with your groupmates.