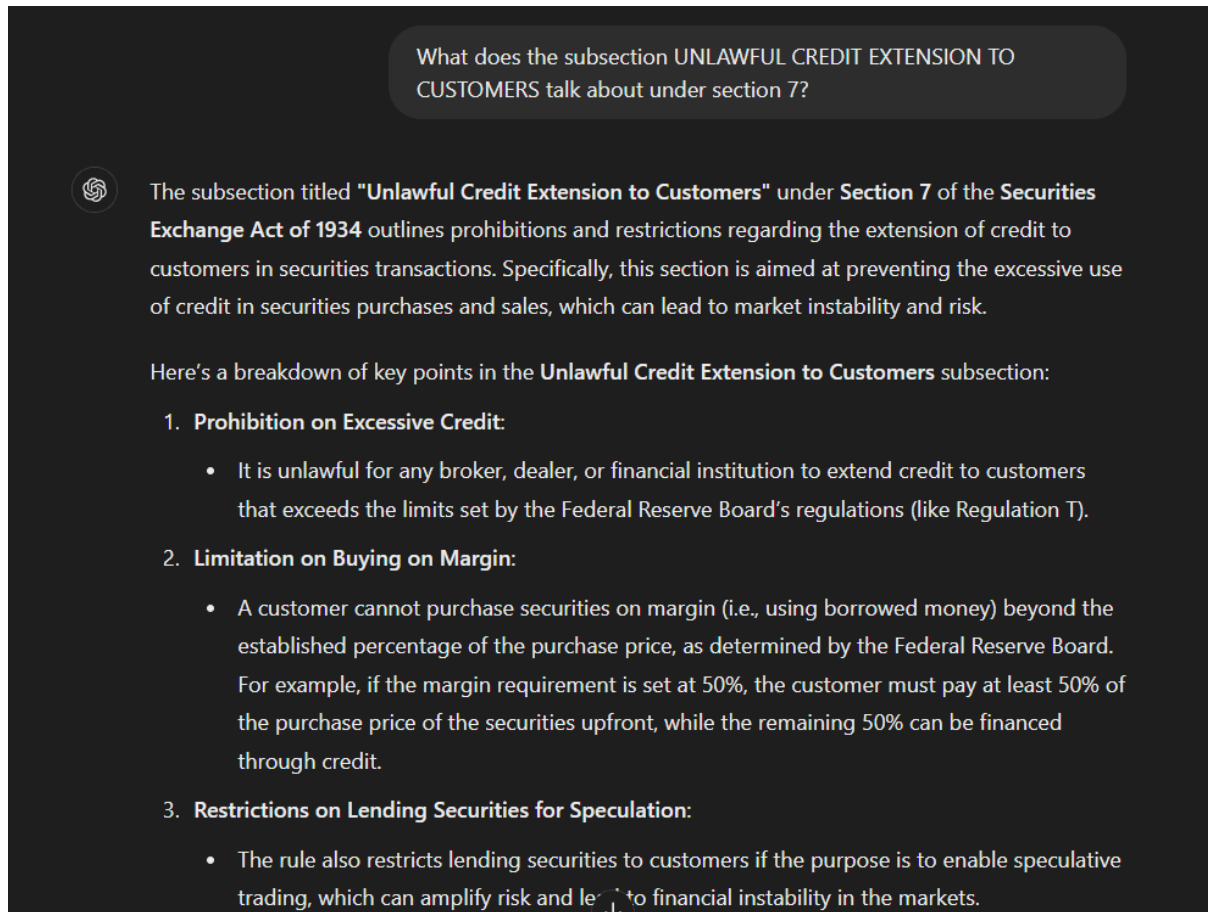


## Misinformation Examples:

### 1. Answering questions regarding SEC Regulations partially correctly:

*Prompt:* What does the subsection UNLAWFUL CREDIT EXTENSION TO CUSTOMERS talk about under section 7 (of Securities Exchange Act of 1934)

*Part of the Answer:*



What does the subsection UNLAWFUL CREDIT EXTENSION TO CUSTOMERS talk about under section 7?

The subsection titled "**Unlawful Credit Extension to Customers**" under **Section 7** of the **Securities Exchange Act of 1934** outlines prohibitions and restrictions regarding the extension of credit to customers in securities transactions. Specifically, this section is aimed at preventing the excessive use of credit in securities purchases and sales, which can lead to market instability and risk.

Here's a breakdown of key points in the **Unlawful Credit Extension to Customers** subsection:

- 1. Prohibition on Excessive Credit:**
  - It is unlawful for any broker, dealer, or financial institution to extend credit to customers that exceeds the limits set by the Federal Reserve Board's regulations (like Regulation T).
- 2. Limitation on Buying on Margin:**
  - A customer cannot purchase securities on margin (i.e., using borrowed money) beyond the established percentage of the purchase price, as determined by the Federal Reserve Board. For example, if the margin requirement is set at 50%, the customer must pay at least 50% of the purchase price of the securities upfront, while the remaining 50% can be financed through credit.
- 3. Restrictions on Lending Securities for Speculation:**
  - The rule also restricts lending securities to customers if the purpose is to enable speculative trading, which can amplify risk and lead to financial instability in the markets.

*Explanation:* No. 3: "Restrictions on Lending Securities for Speculation" is not under the section Unlawful Credit Extension to Customers of the Securities Exchange Act of 1934.

Link: <https://www.govinfo.gov/content/pkg/COMPS-1885/pdf/COMPS-1885.pdf> (Page 81)

## 2. Answering questions regarding SEC Regulations incorrectly:

*Prompt:* For Rules and Regulations for the Securities and Exchange Commission and Major Securities Laws, Part 201 lists out the "Rules of Practice" and under this part, a section is dedicated to Appearance and practice before the Commission. List out the subsections of this section and explain them in detail

*Part of the Answer:*

### **a) Eligibility to Appear and Practice (Rule 102(a))**

This subsection outlines who may appear before the Commission. It permits the following individuals or groups to appear:

#### **1. Attorneys:**

- Must be qualified and admitted to practice law in the highest court of any U.S. state, territory, or the District of Columbia.

#### **2. Accountants:**

- Certified public accountants (CPAs) may represent clients before the SEC in matters where accounting expertise is required, such as audits, financial filings, and compliance issues.

#### **3. Other Qualified Individuals:**

- The SEC may permit other professionals or experts, such as engineers, economists, or consultants, to appear before the Commission in specific circumstances when their expertise is relevant to the matter at hand.

The subsection ensures that anyone appearing before the SEC must have the appropriate credentials and must be professionally qualified in the area they are representing.

*Explanation:* Rule 201.102(a) of Title 17 Chapter II is "**Representing oneself**. In any proceeding, an individual may appear on his or her own behalf." It did not talk about personnels having appropriate credentials or qualification for a certain field.

*Link:* [https://www.ecfr.gov/current/title-17/part-201#p-201.102\(a\)](https://www.ecfr.gov/current/title-17/part-201#p-201.102(a))

### 3. Numerical Confusion:

*Prompt:* Please answer the given financial question based on the context. Context: the following table shows annual aircraft fuel consumption and costs , including taxes , for our mainline and regional operations for 2018 , 2017 and 2016 ( gallons and aircraft fuel expense in millions ) . year gallons average price per gallon aircraft fuel expense percent of total operating expenses . |year|gallons|average price per gallon|aircraft fuel expense|percent of total operating expenses| |2018|4447|\$ 2.23|\$ 9896|23.6% ( 23.6 % )| |2017|4352|1.73|7510|19.6% ( 19.6 % )| |2016|4347|1.42|6180|17.6% ( 17.6 % )| as of december 31 , 2018 , we did not have any fuel hedging contracts outstanding to hedge our fuel consumption . as such , and assuming we do not enter into any future transactions to hedge our fuel consumption , we will continue to be fully exposed to fluctuations in fuel prices . our current policy is not to enter into transactions to hedge our fuel consumption , although we review that policy from time to time based on market conditions and other factors . fuel prices have fluctuated substantially over the past several years . we cannot predict the future availability , price volatility or cost of aircraft fuel . natural disasters ( including hurricanes or similar events in the u.s . southeast and on the gulf coast where a significant portion of domestic refining capacity is located ) , political disruptions or wars involving oil-producing countries , economic sanctions imposed against oil-producing countries or specific industry participants , changes in fuel-related governmental policy , the strength of the u.s . dollar against foreign currencies , changes in the cost to transport or store petroleum products , changes in access to petroleum product pipelines and terminals , speculation in the energy futures markets , changes in aircraft fuel production capacity , environmental concerns and other unpredictable events may result in fuel supply shortages , distribution challenges , additional fuel price volatility and cost increases in the future . see part i , item 1a . risk factors 2013 201cour business is very dependent on the price and availability of aircraft fuel . continued periods of high volatility in fuel costs , increased fuel prices or significant disruptions in the supply of aircraft fuel could have a significant negative impact on our operating results and liquidity . 201d seasonality and other factors due to the greater demand for air travel during the summer months , revenues in the airline industry in the second and third quarters of the year tend to be greater than revenues in the first and fourth quarters of the year . general economic conditions , fears of terrorism or war , fare initiatives , fluctuations in fuel prices , labor actions , weather , natural disasters , outbreaks of disease and other factors could impact this seasonal pattern . therefore , our quarterly results of operations are not necessarily indicative of operating results for the entire year , and historical operating results in a quarterly or annual period are not necessarily indicative of future operating results . domestic and global regulatory landscape general airlines are subject to extensive domestic and international regulatory requirements . domestically , the dot and the federal aviation administration ( faa ) exercise significant regulatory authority over air carriers . the dot , among other things , oversees domestic and international codeshare agreements , international route authorities , competition and consumer protection matters such as advertising , denied boarding compensation and baggage liability . the antitrust division of the department of justice ( doj ) , along with the dot in certain instances , have jurisdiction over airline antitrust matters. .

Question: what was the total operating expenses in 2018 in millions

*Answer:*

**Input:**

"What was the total operating expense in 2018 in millions?"

**ChatGPT 4o output summary:**

$$\text{Total Operating Expenses} = \frac{\text{Aircraft Fuel Expense}}{\text{Percent of Total Operating Expenses}}$$

Given:

- Aircraft Fuel Expense: \$9,896 million
- Percent of Total Operating Expenses: 23.6%

The LLM calculated:  $\text{Total Operating Expenses} = \frac{9,896}{0.236} \approx 41,933.90$  million

Given:

- Aircraft Fuel Expense: \$9,896 million
- Percent of Total Operating Expenses: 23.6%

The LLM calculated:  $\text{Total Operating Expenses} = \frac{9,896}{0.236} \approx 41,933.90$  million

**Actual Answer:**

The correct calculation should result in approximately **\$41,932.20 million**.

*Explanation:* ChatGPT 4o was close, but not correct.

#### 4. Logical reasoning fallacy

*Prompt:* Virus cannot be transmitted through network cables. Why don't we use network cables to make protective clothing

*Answer Summary:*

- Material's inflexibility
- Weight
- Cost

*Explanation:* The LLM failed to recognize that the input contains a logical fallacy. The fact that viruses do not transmit through network cables is irrelevant to using cables for protection.