Supply and Demand Study Guide

Please complete one section at a time with the following structure:

1. Individual-Silent Work Time (5-10 minutes) Students should work through the problems by themselves without any help.
2. Shoulder-Partner Work Time (5-10 minutes) Students can ask questions of their shoulder partner, class leaders, and/or teacher.
3. Full-Class Share-Out (5-15 minutes) Pick a student to come up and share on the board.

Section 1: Show in a diagram a movement along the curve or a shift of the curve. Determine whether the movement or shift is for a demand curve or supply curve.

1. Due to Segway patent disputes, hover boards have been banned for import into the United States. Most are made in China. What will be the effect on production in China?

2. The price of peanut butter rises from $3 to $6 a jar. What is the effect on consumption?

3. The rise in peanut butter prices affect the consumption of jam. What is the effect on consumption?

4. There has been an increased focus to encourage girls and students of color to enter STEM fields like engineering. What will be the effect on the market for engineers?

Section 2: Show in a diagram the effect on the demand curve, the supply curve, the equilibrium price, and the equilibrium quantity of each of the following events. Label each graph and provide justification in writing.

A. The market for Lakers tickets
1. The Lakers have had losing seasons the last four seasons and have not made the playoffs in all of these seasons.
2. Kobe Bryant announces that he will be retiring this season. What happened to the market immediately after this announcement?

B. The market for cashmere scarves
1. Cashmere wool is known for its softness and warmth. The coldest winter in years has started and the import of cashmere into the United States has been obstructed by political instability in areas that produce the fine wool.

C. The market for Dodge Ram pickup trucks
1. Gas prices increase dramatically
2. Workers go on strike at the Dodge Ram factory
D. The market for taxis in Los Angeles

1. Uber, Lyft and other ride sharing companies come to Los Angeles.

Section 3: Read together as a class. Then, have students individually work through the problem. Afterward, pick a student to come up to the board and show their work. Show in a diagram the effect on the demand curve, the supply curve, the equilibrium price, and the equilibrium quantity of each of the following events. Label each graph and provide justification in writing.

What is happening to the market of self-driving cars?

By Nick Kurczewski

March 14, 2017

CARS.COM — California’s Department of Motor Vehicles is ready to let self-driving cars do exactly what they’ve been bred to do all along: operate free of human input while jettisoning traditional driving controls, such as a steering wheel and brake pedal.

After years of waiting, the announcement is welcome news to automakers and tech companies that are heavily invested in the future of autonomous driving systems. Until now, they’ve faced fuzzy bureaucracy and a patchwork of rules when it comes to what is — and is not — legal when developing self-drive cars.

Related: Safety Group Urges States to Plan for Self-Driving Cars

Uber notably pulled its entire fleet of self-driving Volvo prototypes from the streets of its own hometown, San Francisco, after locking horns with the state’s DMV over permits. In this instance, Uber’s source of consternation was the fact that any accidents, or cause for human intervention while the vehicle was driving, had to be logged and eventually made public. In response, Uber pulled its autonomous drive Volvos from California roadways instead of paying the $150 fee to register each vehicle.

While those rules remain unaffected by this announcement, these latest California guidelines signify a massive step in terms of permitting fully self-driving cars to operate on public roads. To drive that point home, these future Level 5 autonomous cars are no longer required to have a steering wheel or pedals to control acceleration and braking. With these design restraints gone, the result could be an entirely new breed of vehicle, a type of car like nothing seen (or sold) before. So, from here on out, the car is in charge — though fail-safe systems to bring a vehicle to a halt, should something go wrong, are still necessary.

Keeping ahead of the game and encouraging innovation are some of the main causes behind this announcement. It’s also a way to insure automakers and lucrative tech firm headquarters don’t jump ship to other states, where laws might be laxer in terms of self-driving governance.

"California has more manufacturers testing autonomous vehicles than any other state, and [March 10th’s] rules continue our leadership with this emerging technology," said California Transportation Agency Secretary Brian P. Kelly. According to the California DMV, there are now 27 manufacturers with autonomous vehicle permits in the state.

These new rules are open to comment for 45 days, and a public hearing is set to be held in Sacramento on April 25.

Why Should I Care? These regulations probably seem unimportant to anyone not living in California. That assumption is wrong: California has a long history of transforming the way the entire nation drives thanks to its leading role in crafting automotive legislation (particularly related to emissions standards). As the largest car market in all 50 states, California's updated rules in the burgeoning autonomous drive industry will have tremendous influence.

Not needing a driver at the helm, or controls to allow human intervention, represents a seismic shift in the testing, development and eventual sale of self-driving cars. The California DMV’s announcement does mention that federal
agencies — such as the Department of Transportation and the National Highway Traffic Safety Administration — maintain the final say over the legality of cars lacking a steering wheel or pedals. But car companies will be able to self-certify autonomous drive vehicles, much like they would a normal car. With these new regulations, the first autonomous cars could potentially go on sale in California by 2018.

Read more at https://www.cars.com/articles/california-dmv-declares-self-driving-cars-can-roam-human-free-1420694455148/#MYhjf1iDkrRG5Aq7.99

What is happening to the market for DVDs?

Nathan McAlone
Jan. 17, 2017, 6:37 PM

Having movies available on Netflix is really bad for DVD sales, according to new academic research.

In 2016, subscription streaming video from the likes of Netflix overtook disc sales for the first time, at $6.2 billion to $5.4 billion. Netflix pays billions to license TV shows and movies, so the rise of subscription video isn't inherently a bad thing for the movie industry.

But a new academic study, pointed to by TorrentFreak, suggests that having a movie on Netflix can depress DVD sales in a major way.

To try and figure out the effect Netflix has on DVD sales, the researchers looked at a "natural experiment" that took place when Epix, a movie and TV distributor, moved its streaming catalog from Netflix to Hulu, which has a much smaller subscriber base, in 2015.

So what happened?

“Our difference-in-difference analyses show that the decline in the streaming availability of Epix's content leads to a 24.7% increase in their DVD sales in the three months after the event,” the paper said.

As soon as its movies got yanked off Netflix, Epix saw a big boost in DVD sales.

The researchers found that the cannibalization effect was "stronger for DVDs released more recently and for movies with better box office performances.” The takeaway here is that licensing a large back catalog of movies to Netflix might not have the same negative effect on sales as giving your marquee new releases up.

These findings might help explain why Netflix's roster of movies has languished in the past few years.

Research in 2016 showed that Netflix's selection of IMDb's 200 highest-rated movies had gone down in the previous two years by a substantial amount, as had its total catalog of movies. Netflix might be finding that the fees demanded by savvy movie execs, to offset any dip in DVD sales, aren't worth it, especially when Netflix's content boss Ted Sarandos says people spend about 1/3 of their time watching movies no matter how good the catalog is.

Another point to note for the DVD market is that the growth of "electronic-sell-through," which is the digital equivalent to buying a DVD, seems to have stalled. iTunes, and other EST platforms, grew 5.4% in 2016, down from 18% in 2015, and 30% in 2014, according to Digital Entertainment Group (via Variety).

This suggests that the industry shouldn't look to that revenue to step into any breach in the DVD market, and that the idea of "owning" a movie might be facing its own natural pressure as people get more comfortable with the subscription model.
