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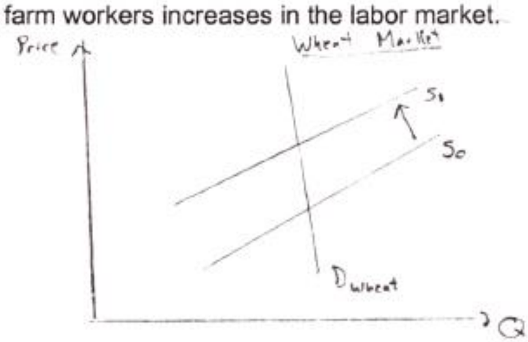
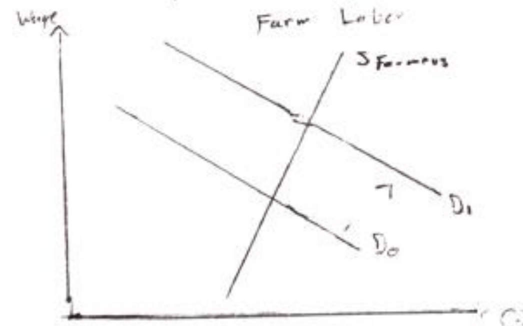
Econ 321

HW#1 *(Please type all answers)*

I. Draw supply-and-demand diagrams for the market for wheat and the market for farm laborers, drawing the demand curve for wheat as highly **inelastic**. Then show what happens in both markets when the MPP of farm laborers decreases.

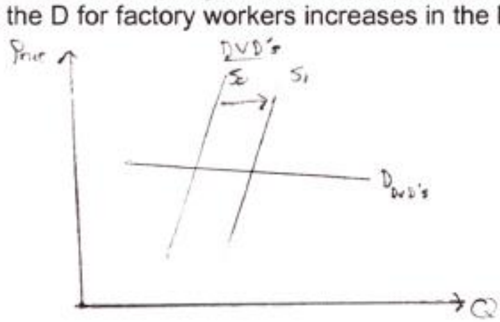
When the MPP of farm laborers decreases, the S of wheat decreases in the product market, but the D for farm workers increases in the labor market.

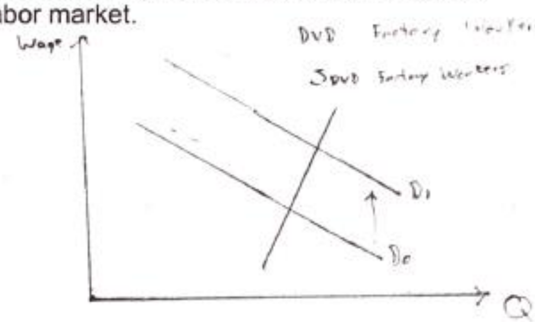




II. Draw supply-and-demand diagrams for the market for DVD players and the market for DVD factory laborers, drawing the demand curve for DVD players as highly **elastic**. Then show what happens in both markets when the MPP of DVD factory laborers increases.

When the MPP of DVD factory laborers increases, the S of DVD players increases in the product market, and the D for factory workers increases in the labor market.

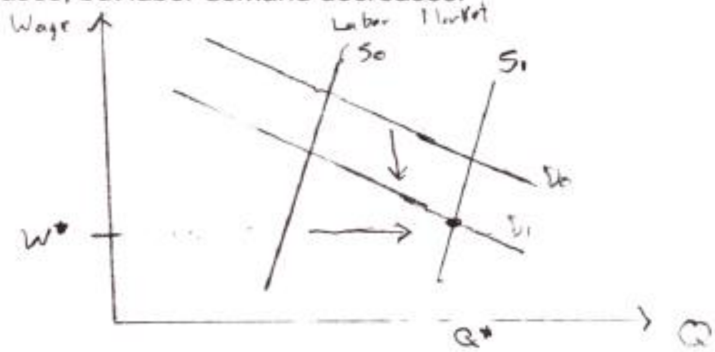




III. Using separate supply-and-demand curves, show what happens in a single occupation if employers provide free coffee for workers, and:

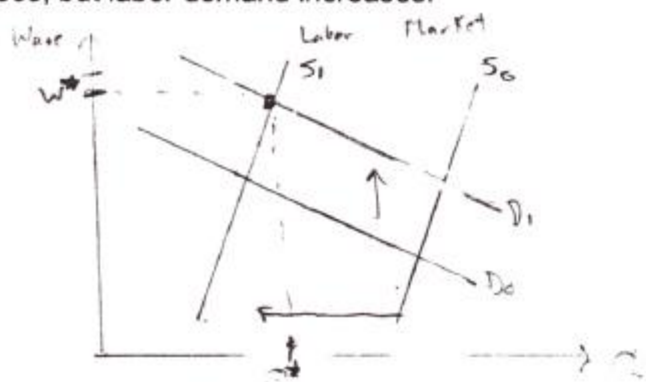
A. Workers like coffee, but the caffeine makes them "hyper" and less able to do their job.

Labor supply increases, but labor demand decreases.



B. Workers actively dislike coffee, but it enhances their ability to keep working late at night.

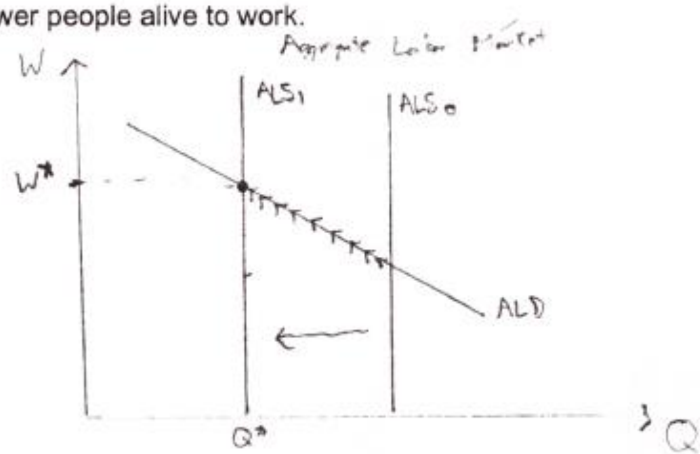
Labor supply decreases, but labor demand increases.



IV. Show what happens to *aggregate* labor demand and *aggregate* labor supply if:

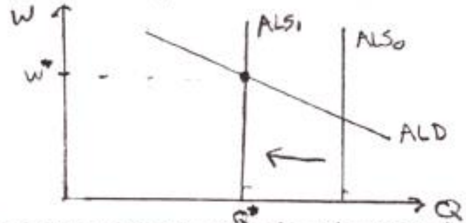
A. A plague kills half of all workers?

ALS falls - there are fewer people alive to work.



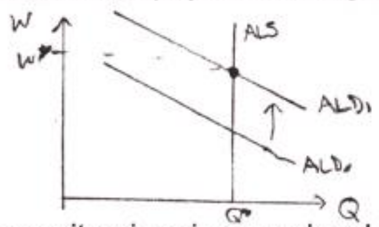
B. The government increases subsidies to (non-productive) education.

ALS falls - some people quit their jobs to become full-time students.



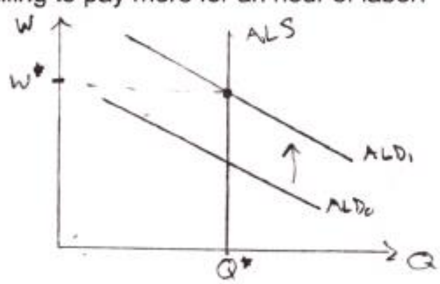
C. The government repeals a law against secretly monitoring workers with video cameras.

ALD increases - monitored workers goof off less, and thus produce more output. This increases workers' marginal product, so employers are willing to pay more for an hour of labor.



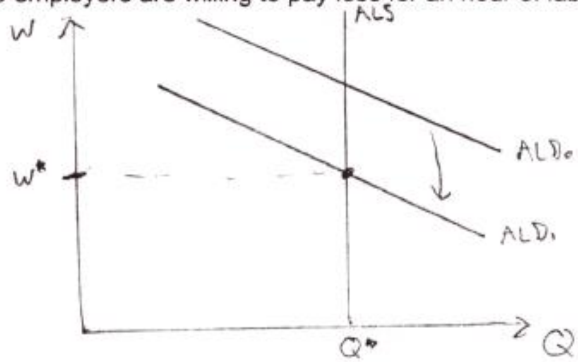
D. A new vitamin raises workers' IQs.

ALD increases - smarter workers are more productive and thus have a higher marginal product, so employers are willing to pay more for an hour of labor.



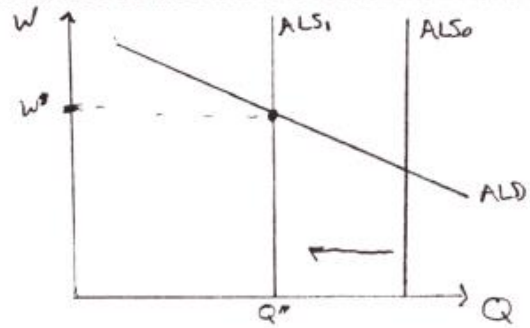
E. The courts rule that unions are immune to prosecution for acts of vandalism committed during strikes.

ALD falls - employers know that there is a greater chance that a worker will commit acts of destruction and thus on net actually have *negative* productivity. Thus, the expected productivity of a worker falls, so employers are willing to pay less for an hour of labor.



F. Higher taxes on gasoline make commuting more expensive.

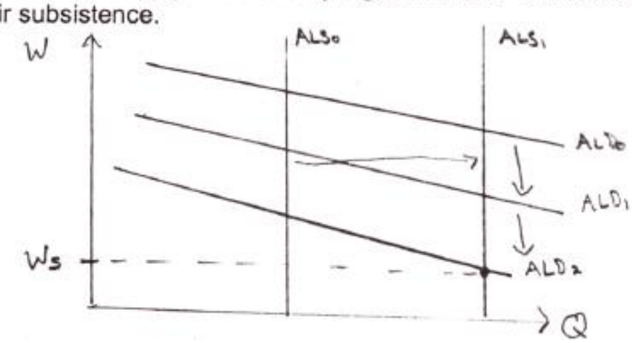
ALS falls - people who are just on the margin of working or not worker decide to leave the work force. (I would also accept: ALS is unchanged: If ALS is vertical, indicating an insensitivity of work to the real wage, then it will also be insensitive to reductions in take-home pay in general).



V. Is it *possible* for workers in a free market labor to earn "subsistence wages"? Why or why not?

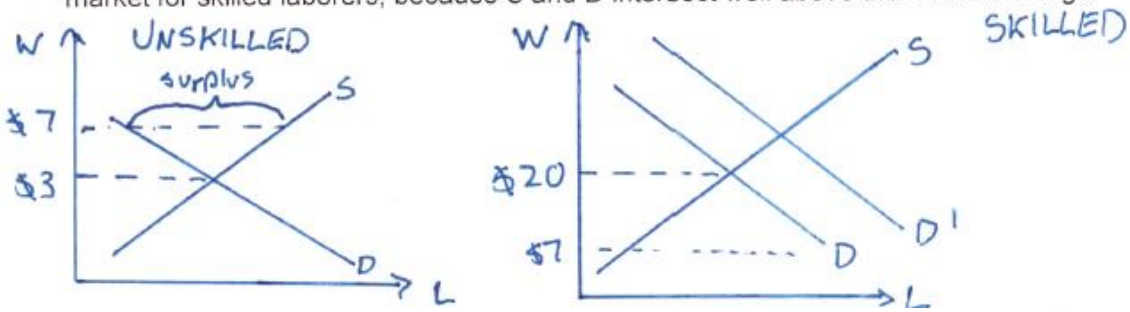
Yes, it is possible. If labor supply is sufficiently high, and labor demand sufficiently low, workers will earn only their subsistence.

Ws denotes the subsistence wage



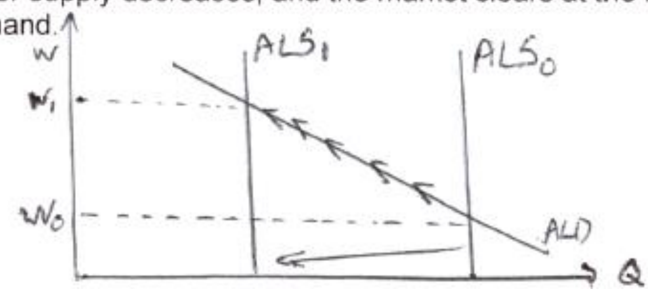
VI. Suppose there are equal quantities of two kinds of labor: skilled and unskilled. Demand for skilled labor is much higher: the market wage of skilled workers is \$20, the market wage of unskilled is \$3. Diagram the effect of a \$7 minimum wage on *both* markets.

The minimum wage raises the wage of unskilled labor, creating a labor surplus. And by raising the price of unskilled labor, it increases demand for skilled labor; since unskilled labor is now more expensive, employers buy more skilled labor instead. There is no surplus in the labor market for skilled laborers, because S and D intersect well above the minimum wage.



VII. Diagram the effect of (a) Abolishing the minimum wage **and** (b) Raising unemployment benefits at the same time.

Labor supply decreases, and the market clears at the new intersection of labor supply and labor demand.

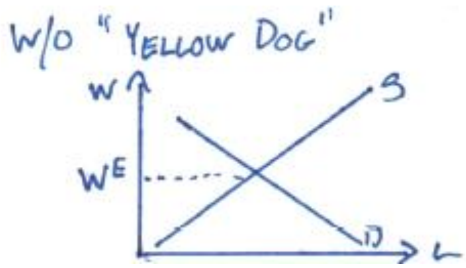


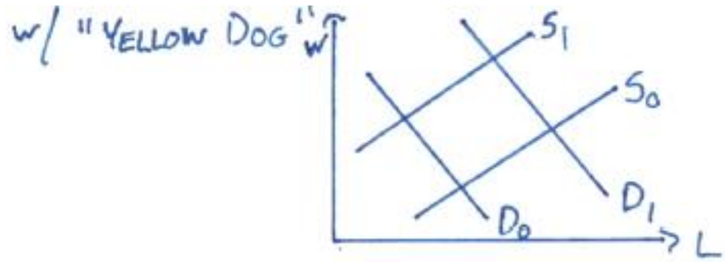
VIII. The Family Leave Act, passed in Clinton's first term in office, requires employers to give workers three months unpaid leave to care for a new-born infant. What happens in the labor market if wages are permitted to change? What happens if the government makes it illegal to change wages in response to the legislation?

Labor supply increases (jobs have more amenities at a given wage) and labor demand decreases (workers cost employers more at a given wage). If wages can change, they fall. If wages can't change, S still increases and D still falls, but the market can't clear. There is a price floor at the old equilibrium wage, and a surplus of labor.

IX. Suppose "yellow dog" contracts were legal. Draw two labor market diagrams: One for jobs with a "yellow dog" contract, one for jobs without.

Labor demand for workers who sign the "yellow dog" contract increases (they are less costly to hire), but labor supply decreases (workers lose their chance to join a union). Compared to other workers, the "yellow dog" workers will be paid more. If the costs of unions are high compared to the benefits, demand increases a lot, but supply decreases only a little.





X. Find a discussion of 19th century labor markets in the history textbook of your choice. <u>Summarize</u> what the historian says. Which of the historian's claims would Caplan be likely to dispute? To accept? (2 paragraphs)

A standard treatment appears in Thomas Bailey, *The American Pageant*, (1966) pp.536-7. Bailey compares 19th-century U.S. workers to "Roman galley slaves," explains that "a glutted labor market, moreover, severely handicapped the wage earners," and says that the new railroad network "could shuttle unemployed workers, including Negroes and immigrants, into areas where wages were high, and thus beat standards down." Bailey does concede that mechanization created as well as destroyed jobs.

Caplan would agree that mechanization created as well as destroyed jobs, but would emphasize that mechanization also brought large increases in real wages due to increased productivity. Contrary to Bailey, wage-earners saw larger raises in the 19th-century than ever before; they were not "severe handicapped." But labor mobility did tend to equalize wages for workers of identical skills. What Bailey fails to mention is that railroads raised wages in low-wage areas as well as holding them down in high-wage areas. Overall, Bailey's "slavery" comparison is rather forced.