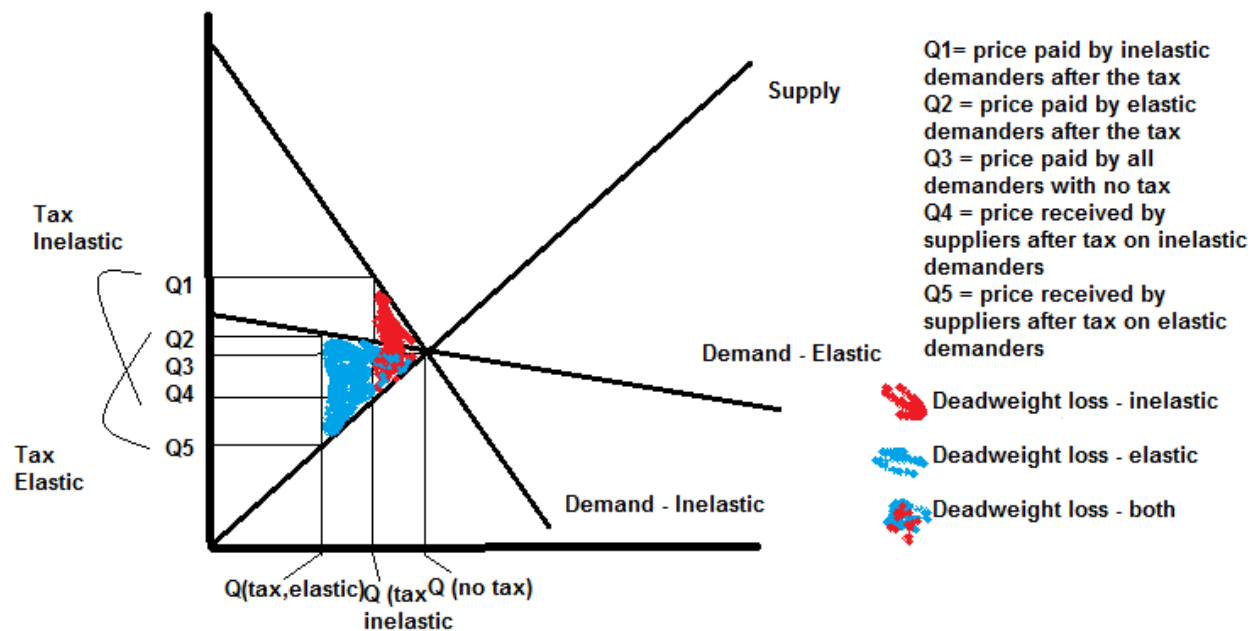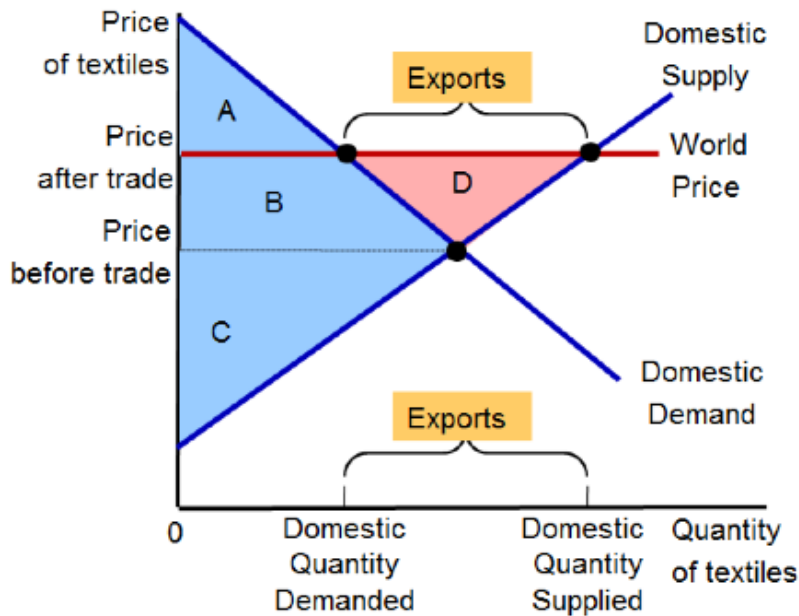1. This question is related to opportunity costs and tradeoffs. An unpaid college athlete who can leaves school before graduating to play professional sports is a rational decision maker as the opportunity cost of college is the annual salary of a professional athlete (FYI, a rookie in the NBA has a minimum salary over $500,000. Minimum salary in the NFL is over $400,000 or for a practice squad player over $100,000). You can also finish a degree program later in life (see Shaquille O'Neal). (B)

2. This is the definition of a positive externality. When one person is vaccinated they are unlikely to be a carrier of the disease. Because vaccinations are not 100% effective, those individuals susceptible to disease are less likely to encounter the disease if everyone is vaccinated. (B)

3. Straight from notes. (C)

4. In your notes. (A)

5. This is both an income payment to a household as well as labor rented out to a firm. (D)

6. Any point on the PPF is "efficient" as it uses all productive resources. Inside the PPF it is inefficient due to unemployment or underemployment of land, labor and capital. Outside the PPF it is impossible. Like seeing Batman and Bruce Wayne at the same time… whoops SPOILERS.(B)

7. Economic growth increases the ability to produce goods and services thus expanding the PPF. (A)

8. Positive statements are facts. Normative statements are opinions. B is a fact as taxing a good means that a smaller quantity will be purchased. C is a fact as some workers (especially the developmentally disabled, teenagers and the lesser-educated) are unable to find work when the minimum wage is high. D is possibly true, economic growth was very high 1998-2000 when the U.S. federal budget deficit was almost eradicated. A is an opinion, though it may be based on fact. (A)

9. Tax revenue is equal to the amount of the tax x the quantity that is taxed. The quantity that is taxed is Q2 while the amount of the tax is p3-p1. So the area of the graph B+D is equivalent to Q2*(p3-p1). (C)

10. Producer surplus is the area above the supply curve to the price that suppliers receive. After the tax is imposed the supplier receives p1 as the demander pays p3. p3-p1 goes to the gov't.   So producer surplus when the taxed is imposed is just F. For fun you should do consumer surplus and deadweight loss too. (D)

11. For fun you can draw this out for yourself. See my pretty picture below. You can see that the quantity demanded falls more for the elastic demand curve relative to the inelastic demand curve so A is true. Relative to the price with no tax… you can see that the inelastic demanders must pay much more after the tax is imposed relative to the elastic demanders so B is true. Lastly, have a look at the deadweight loss from the tax. You should be able to see that the deadweight loss triangle is larger for the inelastic demanders than the elastic demanders so C is also true. (D)

Q1= price paid by inelastic demanders after the tax
Q2 = price paid by elastic demanders after the tax
Q3 = price paid by all demanders with no tax
Q4 = price received by suppliers after tax on inelastic demanders
Q5 = price received by suppliers after tax on elastic demanders

Deadweight loss - inelastic
Deadweight loss - elastic
Deadweight loss - both

12. From notes. You should also be able to draw the Laffer curve. (A)
13. See graph below. With no trade, CS = A + B and PS = C. After trade CS = A (so they lose from trade) and PS = B + C + D (so they gain). (A)

Price of textiles

Exports

A

Price after trade — World Price

Domestic Supply

B

D

Price before trade

C

Domestic Demand

Exports

0   Domestic Quantity Demanded   Domestic Quantity Supplied   Quantity of textiles

14. Because the world price is below the "no trade" equilibrium this country will import the good. That means that consumers will benefit from lower prices (and greater quantity) but producers won't be able to compete very well against foreign competition so they will lose. For fun do CS, PS before and after trade. (A)
15. Remember that tax revenue = quantity bought and sold under the tax x amount of the tax. The quantity bought and sold is the amount of imports (q3-q2) and the amount of the tax is the tariff. (A)
16. Two parts to this question. First, you need to know what the quota would be to get the equivalent tariff. Under the tariff, consumers purchase 16 but domestic production is only 7. So we must import in 9. Thus, the quota level would be 9 to get a similar equilibrium. Second, we need to remember that tariffs bring us tax revenue but quotas don't. Thus, tariffs have a greater total surplus relative to a tariff. (C)
17. From notes. Illegal activity is not counted in GDP so making them legal increases GDP. (B)
18. A is included because it's gross DOMESTIC product and the work is done domestically. B is not because it's an existing home not a new home and illegal activities are never included. (A)
19. A is owner's equivalent rent which is included in GDP as a service paid to oneself. B sounds like GDP because its payment for a service (housing) for which one could get a receipt. C is also GDP because it is a service paid for work done domestically. (D)
20. So A is the technical definition. B is the exact opposite, so, FYI, when you see two answers in a multiple choice test that are exact opposites then usually one of those is correct. C and D are just confusing nonsense trying to catch student who never came to class. (A)
21. Mind blown! Take (new – old)/old and you get a .10 or 10% inflation rate for each one. (D)
22. You can calculate the rate of inflation regardless of the base year. Remember to use the formula (new – old)/old. Basket price in 2005 is 10x11 + 15x6 = $200 while basket price in 2006 is 10x9 + 15x10 = $240. Index number in 2005 is 100x($200/$240)=83.3. (100-83.3)/83.3 = .20 or 20% inflation. (B)
23. I love these questions. It's four true/false questions hiding in a multiple choice question. A is false because they both have base years. B is false because they're both used to compute the inflation rate using different baskets of goods. C is false because they're the exact opposite: CPI is the basket of

consumer goods and GDP deflator is the domestic goods and services including things bought by businesses and governments. Gosh, D had better be true… and it is! (D)

24. True story, professor plum used to have a tobacco pipe but smoking isn't cool anymore. That's probably made him cranky so I'd stay away from him if he's in the library with the candlestick. Also, isn't it strange that a kid's game is basically built around murder? Let's make this question real easy… $12,000/40=300 so the professor could have bought the basket 300 times that year. $24,000/70=342. $36,000/130=276. (D)

25. The nominal interest rate is the increase in actual dollars but real is the increase in the ability of those dollars to purchase goods/services. (B)

26. Do you enjoy piano jazz? I'm writing this up at a Starbucks and I don't know if I do or not. I've often heard that no one really knows when jazz is good but we always know when jazz is bad. It sounds like there's a cat on a piano. Nominal interest rate – inflation = real interest rate. So 8 – inflation = 5.5. (C)

27. Savings impacts you the same way that it impacts the macroeconomy. If you chose to bike to school instead of driving a car then you'll save all the money that would have been spent on your car. In the short-run you'll have lower income/living standards because cars are great. In the long-run/retirement you'll have all that money you saved to buy more goods so you're income in the future will be higher because you saved. In the macroeconomy savings leads to investment (I) which brings us more capital equipment and machinery and greater GDP. (A)

28. Remember the graph? Poorer countries can gain a lot from a little increase in capital relative to richer countries allowing them to "catch-up" with richer countries. Interestingly, Give Directly is a charity that just gives cash to poor people in poor countries. Some of those individuals just waste the money but many of those individual invest in housing by replacing their thatch roofs (which need to be replaced every year) with metal roofs which last much longer. These roofs effectively act as savings as they remove an annual expense from these families. (B)

29. A is incorrect because exports increase NX and Y = C + I + G + NX. B is incorrect because FDI is highly correlated with economic growth. Poorly developed property rights reduces investment and capital equipment accumulation so that could cause any country to become or stay poor. (C)

30. A is technology, K is capital equipment and machinery, H is human capital and N is natural resources. (A)