1. (40 points) From a news report two weeks ago: "Mozilla has accused Microsoft of trying to go back to the 'digital dark ages' by limiting rival browsers in the [mobile tablet] version of Windows 8. Third-party browsers won't work in the desktop mode, and Metro style browsers will be limited in what APIs they can use, said Mozilla general counsel Harvey Anderson, forcing users to move to IE instead. Mozilla said it was the first step toward a new platform lock-in that 'restricts user choice, reduces competition and chills innovation.'" Do you agree with Mozilla?

The key here is that you had to understand the question is about market power. If you got that clearly, you get 30 points, with additional points for good arguments for why this case is like the Microsoft-Netscape case and why it is not. If you do not get market power, you can get a maximum of 25 points, which you can get if you lay out a clear explanation of what markets we're discussing and how Microsoft would or would not be smart in limiting access for third parties.

A little more detail:

If market is tablets
   Microsoft has no market power now
   Apple has market power and somewhat limits browser competition (treating browser as integrated part of the operating system)
   Browser may be an integrated product (should give evidence of why or why not)
If market is PCs
   Microsoft has considerable market power still (85%)
   Microsoft has just finished consent decree
   Browser may be integrated product, but much less clear than tablets
   Microsoft will have built in market power in tablet PCs, especially in enterprise
   Power is less than in 1998

MSFT is trying to connect markets!

Next, entry barriers
Limited API is an entry barrier. If they can’t do certain things, then browser not as effective. But default installation is not necessarily a big barrier (change in market share over time in browser market for PCs).

Common problems: Lose 15 points for not discussing market power.
2. (40 points) Last week, market analysts reported that high-level executives at Facebook are considering buying Norwegian software company Opera, maker of a web browser with the same name. Why would it make sense for Facebook to buy Opera? Why would it not make sense?

Overall: It does not make much sense, because most of Opera's advantages would be built into the price and synergies seem limited. There are more incorrect explanations for the merger than correct ones, but either way you came down the specific arguments mattered.

Why would it make sense?
- How does Facebook make money now? Advertising
- How does it make money in the future? Platform (…Advertising, and maybe data)
- Browser is a bridge to this
- Speed may be essential (unlikely; who wins this?)
- Mobile may be essential (likely; Google has platform here)
- Opera has mobile expertise, including advertising (and developing countries)
- Integrate browsing for complete user picture
- Create more competition in browser market, squeezed by browsers

Bad arguments for the merger:
- Opera has many users
- Opera is big in developing markets
- Facebook needs a browser (could build)

Why would it not make sense?
- Could partner or contract for much less
- Opera makes some money independently, would lose this
- Difficult to retain talent, integrate companies
- Would lose Opera as third player, is independence valued?
- Opera can contract with many companies as independent
- Will this piss off other browsers?

Common problems: Lose 5 points for not defining what Opera does and how it makes money. Lose 12 points for giving no arguments against the merger. Lose 6 points by not discussing whether could contract to get same benefits.
3. (30 points) The FCC recently received authorization to conduct incentive auctions to buy up spectrum currently used by local UHF television stations and non-profits like university television stations, combine that spectrum into usable contiguous blocks and re-auction those blocks to high value users for mobile broadband. This "low band" spectrum is of outstanding quality for its ability to be received through walls without interference and for use in high-intensity applications like streaming video. Currently the overwhelming propensity of low band mobile spectrum is owned by Verizon and AT and T. The FCC is debating whether it should place a cap on the national amount of ownership of low band spectrum that any one company can own to give help to smaller or regional players like Metro PCS, T-Mobile and the like. What are the pros and cons of a national cap and what factors should the FCC consider?

Main idea: Market power vs. innovation argument
Blockaded entry, just like satellite spectrum
Need big national networks to invest
Quality, fastest service

Pros of a national cap
Avoids oligopoly up front
By adding players to the market, may lower price for consumers
Spectrum, once sold, is a large barrier to entry—number of players only goes down over time—big players could strategically buy up spectrum to prevent entry

Cons
More difficult to set up a national network
Economies of scale (infrastructure, advertising) are large
Need for roaming is important

Factors
Are there other competitive options?
Satellite, regular mobile broadband, WiFi
Is this a natural monopoly? Are infrastructure investments large beyond buying spectrum? (Yes, but not at the natural monopoly level)
Is the cap regional (another player in Maine) or spectrum area (100-200)? Can smaller players build national network? Do they need other regulation to allow them to get reasonable roaming charges?

Common problems: Lose 12 points for not defining why economies of scale lead to quality improvements. Lose 3 points for not discussing other competitive options. Lose 3 points for not discussing local vs. national market issue.
4. (20 points) Echostar, operator of the satellite TV broadcaster Dish Network, announced in May a new form of DVR that costs $6 per month and comes with a “hop” device that one push of a button will skip all the ads in TV shows completely. The television networks are suing to stop the feature. What will be the impact of “the hopper” on the market for video programming?

Main idea: If this technology is novel and broadly adopted, networks will try to reduce their fixed costs of creating content and the content quality will suffer.

Consumers who are (or become) customers of Dish and use the hopper will pay $6/month and watch fewer ads – Dish is hoping that $6 is enough to afford making less money from ads. Advertisers will have fewer consumers watching their ads and be unwilling to pay as much as before to networks/distributors; they may compensate for smaller audiences by creating new ad formats like product placement within content and playing ads at the same time as content. Because content is a high fixed cost to networks, they can try to reduce their costs by reducing quality (more cheap shows). Depending on how much market power they have, networks can pressure Dish by threatening to leave Dish’s channel lineup. Networks can also try to mitigate lost ad revenue by driving consumers to new paid delivery models (e.g. Hulu Plus).

Dish is a relatively small provider, and consumers may not be willing to switch to Dish in order to get the hopper. Still, the hopper’s impact could extend beyond the Dish product to other DVRs if they copy the feature. On the other hand, the impact of the hopper may be small: Is this sufficiently better than other DVRs to get consumers to switch to it? Can enough consumers switch to create problems for advertisers? In addition, the networks’ lawsuit could stop Dish’s hopper, but will attacking Dish stop the technology? Are courts likely to agree that networks own a copyright in the shows+ads bundle?

Common problems: Lose 5 points for not discussing whether the hopper will be widely adopted. Lose 3 points for not specifically describing programming as a fixed cost. Lose 2 points for not mentioning the lawsuit at all.
5. (40 points) With the failure of the AT&T merger with T-Mobile, there are now several new potential suitors. In 2 pages or less, provide an analysis of whether you think the DOJ would allow a merger of T-Mobile with Sprint or with several of the regional carriers (you do not need to make HHI calculations for yourself, use the qualitative information you already know).

This question is like the AT&T / T-Mobile case, except asking whether the DOJ would approve the merger instead of the FCC. We need to apply the DOJ’s Horizontal Merger Guidelines. Main idea: this is a very concentrated market and the DOJ is unlikely to approve any consolidation between companies that compete in local markets.

Market definition

Mobile voice and data services
Geography local – include regional carriers since DOJ
Sprint: significantly more concentration even with regional carriers included
Regional carriers: concentration still unlikely to pass in every local market

Coordination and barriers to market power
Sprint: still like AT&T version with innovative T-Mobile, argues against merger
Regional carriers: harder case, probably still increases coordination

Entry
No, same arguments as AT&T version – fixed costs, spectrum limitations

Efficiencies
Upgrade network – but is it merger-specific?
Anyway, Sprint and T-Mobile use different network technologies
Free up spectrum – but how does that help consumers
Scale and fixed costs

Failing firm
Probably no, same arguments as AT&T version – could argue for regional carriers in the abstract but not the case for the larger ones

Common problems: Lose 20 points for not making the main concentration argument.
6. (40 points) Earlier this month, Microsoft announced it was investing in a joint venture with Barnes and Noble bookseller to own and develop the Nook eReader/tablet including developing a Nook application for the Windows 8 mobile platform. Is this a sensible strategic move for Microsoft? For Barnes and Noble?

This is a vertical integration question (tablet hardware and ebook software platform). The question is what synergies the two companies get from this “purchase” that they wouldn’t be able to get from a contract. Are they making relationship-specific investments? Do they have quality concerns they can’t write into a contract? Are they reducing costs of sharing information? The joint venture will also affect their competitive positions in their different markets.

**Competition**
- Complement for Windows tablets, like iBooks/Kindle apps on iOS/Android
- May get Nook device on Windows (devices now built on Google’s Android)
- Bolsters third front in ebooks for B&N to compete with Amazon and Apple
- Indirect network externalities between readers and publishers of ebooks
- Switching costs once have ebook library in particular format

**Other**
- Education market particularly valuable for both sides
- Learning software (and hardware, to lesser extent) for B&N (including hiring)
- Learning tablet experience for Microsoft
- Infusion of cash for B&N
- Each get access to other’s markets/customers
- Cooperation on channels (including help entering global markets for B&N)

**Why would it not make sense?**
- Could partner for much less effort/money
- Nook risks looking Microsoft-specific, can Nook keep devices on Android?
- Can Nook still have an Apple app (probably)?

**Common problems:** Lose 5 points for not discussing as a vertical integration question (relationship-specific investments, contractibility). Lose 10 points for not discussing any arguments against the JV. Lose 5 points for not discussing what network externalities there are in the device/ebook markets.