## Chapter 9

[1](http://openstax.org/books/principles-microeconomics-3e/pages/9-self-check-questions#fs-idp100806496).

1. A patent is a government-enforced barrier to entry.
2. This is not a barrier to entry.
3. This is not a barrier to entry.
4. This is a barrier to entry, but it is not government-enforced.
5. This is a barrier to entry, but it is not directly government enforced.

[2](http://openstax.org/books/principles-microeconomics-3e/pages/9-self-check-questions#fs-idm13007456).

1. This is a government-enforced barrier to entry.
2. This is an example of a government law, but perhaps it is not much of a barrier to entry if most people can pass the safety test and get insurance.
3. Trademarks are enforced by government, and therefore are a barrier to entry.
4. This is probably not a barrier to entry, since there are a number of different ways of getting pure water.
5. This is a barrier to entry, but it is not government-enforced.

[3](http://openstax.org/books/principles-microeconomics-3e/pages/9-self-check-questions#fs-idm2309808).

Because of economies of scale, each firm would produce at a higher average cost than before. (They would each have to build their own power lines.) As a result, they would each have to raise prices to cover their higher costs. The policy would fail.

[4](http://openstax.org/books/principles-microeconomics-3e/pages/9-self-check-questions#fs-idp761744).

Shorter patent protection would make innovation less lucrative, so the amount of research and development would likely decline.

[5](http://openstax.org/books/principles-microeconomics-3e/pages/9-self-check-questions#fs-idm156188544).

If price falls below AVC, the firm will not be able to earn enough revenues even to cover its variable costs. In such a case, it will suffer a smaller loss if it shuts down and produces no output. By contrast, if it stayed in operation and produced the level of output where MR = MC, it would lose all of its fixed costs plus some variable costs. If it shuts down, it only loses its fixed costs.

[6](http://openstax.org/books/principles-microeconomics-3e/pages/9-self-check-questions#fs-idm138176688).

This scenario is called “perfect price discrimination.” The result would be that the monopolist would produce more output, the same amount in fact as would be produced by a perfectly competitive industry. However, there would be no consumer surplus since each buyer is paying exactly what they think the product is worth. Therefore, the monopolist would be earning the maximum possible profits.