Problem 1. Suppose initially that the short-run equilibrium coincides with the long-run equilibrium. Label this equilibrium A. Now suppose the stock market experiences a large boom when Google, Amazon, Microsoft, and Facebook all merge into one giant conglomerate and decide to colonize Mars in the first step of their plan to rule the observable universe. Show what happens in the short run and in the long run and label it B.

Problem 2. Suppose the Federal Reserve decides it doesn't like the implications you've found in the first problem. In particular, they don't want the price level to change from its initial level. (They're indifferent to the rest of the universe.) What tools could the Federal Reserve use to ensure a stable price level in the face of a booming stock market?

Problem 3. In an alternate universe, Ronald Rump is elected President of the United States of Umareco. President Rump really loves immigrants, so he and Congress enact policy that dramatically increases the number of people immigrating into the United States. Show how this affects the economy using the AS/AD framework.

Problem 4. Ever seen the movie *Idiocracy*? Suppose that actually happens—human capital takes a nose dive. Show how this affects the economy using the AS/AD framework.

Problem 5. Suppose a super villain, Diogenes the Cynic, invades the Federal Reserve and cuts the money supply in half—he burns $750 billion for his own amusement. Show the effect of Diogenes' actions using the AS/AD framework.

Problem 6. What could the government do to try combat Diogenes' antics as found above to make sure that output remains at its full output level?