For the following problems, suppose initially that the short-run and long-run equilibria coincide.

Problem 1. 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 both the short run and the long run using the AD/AS framework.

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. Despite his name, President Rump actually really loves immigrants, so he and Congress enact policy that dramatically increases the number of people immigrating into the United States and becoming permanent citizens. 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 nosedive. 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?