***Cell Phone Project***

“I have an iPhone 5, but I’m thinking about the iPhone 6…”

“I have a 64 gig iPhone 5, the phone is fully paid off, and I get charged $80 per month for unlimited calling, texting and 3 gigs of data. The new 64 gig iPhone is going to be $425 (I’m eligible for an upgrade), and if I switch plans I can get my unlimited calling, texting and 3 gigs of data for $50 per month…”

“If I switch, I’m going to be locked-in with a 2-year plan…I really like my current phone, so money is the deciding factor, and I want to save…”

Please answer the following questions:

1. Which plan should I choose?
2. Which one is cheaper after the first month?
3. At what point would the plans effectively be the same cost?
4. Create a system of equations for each phone.
5. Graph the system of equations.
6. Determine their point of intersection.
7. What does the point of intersection mean?