Suppose that an economy produces three goods: cars, computers, and oranges. Quantities and prices for 2012 and 2013 are as follows:

|          | 2012     |          | 2013     |          |
|----------|----------|----------|----------|----------|
|          | Quantity | Price    | Quantity | Price    |
| Cars     | 10       | $20,000  | 12       | $30,000  |
| Computers| 40       | $1,000   | 60       | $500     |
| Oranges  | 10,000   | $1       | 10,000   | $1       |

1. Compute nominal GDP in 2012 and 2013. What is the percentage rate of growth in nominal GDP between the two years?
2. Calculate real GDP for both years using 2012 prices. (In other words, what would the value of GDP be in each year at 2012 prices?) What is the percentage growth rate of real GDP?
3. Now calculate real GDP for both years using 2013 prices. What is the percentage growth rate of real GDP using 2013 prices? Why does this differ from your previous calculation?
4. Which of your growth rates is larger and why? [Hint: The growth rates of the various commodities are weighted by their prices in calculating aggregate growth. Which good is growing fastest? What is happening to its price (and could this be why it grows so fast)? Which year's prices gives the fastest-growing good the highest weight?]