$\qquad$
In each of the following cases, determine how much GDP and each of its components is affected (if at all).

1. Debbie spends $\$ 200$ to buy her husband dinner at the finest restaurant in Boston.
2. Sarah spends $\$ 1800$ on a new laptop to use in her publishing business. The laptop was built in China.
3. Jane spends $\$ 1200$ on a computer to use in her editing business. She got last year's model on sale for a great price from a local manufacturer.
4. General Motors builds $\$ 500$ million worth of cars, but consumers only buy $\$ 470$ million worth of them.

|  | Pizza |  |  | Latte |
| :--- | :--- | :--- | :--- | :--- |
| Year | $\boldsymbol{P}$ | $\boldsymbol{Q}$ | $\boldsymbol{P}$ | $\boldsymbol{Q}$ |
| 2002 | $\$ 10$ | 400 | $\$ 2.00$ | 1000 |
| 2003 | $\$ 11$ | 500 | $\$ 2.50$ | 1100 |
| 2004 | $\$ 12$ | 600 | $\$ 3.00$ | 1200 |

5. Based on the data above, compute the nominal GDP for each year as well as the change in nominal GDP from 2002-2003 and 2003-2004.
6. Based on the data above, use 2002 as the base year and compute the real GDP for each year as well as the change in real GDP from 2002-2003 and 2003-2004.

| Year | Nominal <br> GDP | Real <br> GDP |
| :---: | :---: | :---: |
| 2002 | $\$ 6000$ | $\$ 6000$ |
| 2003 | $\$ 8250$ | $\$ 7200$ |
| 2004 | $\$ 10,800$ | $\$ 8400$ |

7. Based on the data above, calculate the change in real and nominal GDP from 2002-2003 and 2003-2004.
8. Based on the data above, compute the GDP Deflator for each year as well as the change in the GDP Deflator from 2002-2003 and 2003-2004.

|  | 2004 (base yr) |  | 2005 |  | 2006 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $P$ | $Q$ | $P$ | $Q$ | $P$ | $Q$ |
| good A | $\$ 30$ | 900 | $\$ 31$ | 1,000 | $\$ 36$ | 1050 |
| good B | $\$ 100$ | 192 | $\$ 102$ | 200 | $\$ 100$ | 205 |

Use the above data to solve these problems:
9. Compute nominal GDP in 2004.
10. Compute real GDP in 2005.
11. Compute the GDP deflator in 2006.

