You MUST show work clearly.

1. (8 pts) Choose C, I, G, X, M or N (for none of the above) to show how the following transactions will be recorded in Canada’s GDP. Some transactions may require more than one answer.

A. N The government of Canada wants a Japanese factory in Canada to be successful and increase opportunities for Canadian workers. It pays the company $2000 for each Canadian worker it hires.

B. N A Japanese car company with a factory in Canada hires some more Canadian workers to expand production in their Canadian factory.

C. I You buy a new truck (that was made in a Japanese owned factory in Canada) to deliver groceries for your business.

D. J, M A Japanese company buys some new robots from Japan to expand production in their Canadian factory.

2. (24 pts) Our economy produces only three final goods. Use 2015 as the base year.

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Good A</th>
<th>Good B</th>
<th>Good C</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Price</td>
<td>Quantity</td>
<td>Price</td>
<td>Quantity</td>
</tr>
<tr>
<td>2013</td>
<td>10</td>
<td>4</td>
<td>15</td>
<td>8</td>
</tr>
<tr>
<td>2014</td>
<td>9</td>
<td>8</td>
<td>21</td>
<td>6</td>
</tr>
<tr>
<td>2015</td>
<td>12</td>
<td>6</td>
<td>20</td>
<td>5</td>
</tr>
<tr>
<td>2016</td>
<td>14</td>
<td>7</td>
<td>22</td>
<td>4</td>
</tr>
</tbody>
</table>

A. Calculate the nominal GDP and the nominal growth rate for each of the above four years.
B. Calculate the real GDP and the real growth rate for each of the above four years.
C. Calculate the GDP deflator and the inflation rate for each of the above four years.
D. Calculate the CPI and the inflation rate for each of the above four years.
E. Which year had the highest increase in the standard of living? What number did you use to determine this?
F. Which year had the highest price level? What number did you use to determine this?

E: 2014 = 102.6  2015 = 102.8 CPI 2014 = 102.6 2015 = 102.8

3. (5 pts) Suppose the GDP in today’s dollars rose by 9.6% while the GDP in 2007$ dollars rose from $742.8 to $783.4. What was the inflation rate?

\[
\frac{1.096}{1.055} = 1.039
\]

4. (5 pts) You borrow $100 worth of beans (8 sacks) and promise to pay 5.5% (nominal) interest on your loan. If the price of beans rises by 3% how many sacks of beans will end your debt next year? (You can have a decimal amount of sacks)

\[
\frac{100}{1.03} = 97.08 \text{ sacks}
\]

5. (8pts) Suppose the participation rate is 58.4%. The number of people employed is 29.4 million. The unemployment rate is 12.3% and the population of our country is 79.0 million.

A. \(100 \times 0.584 = 58.4\) How many people are unemployed?
B. \(79.0 - 29.4 = 49.6\) How many people are unable to work?