Problem Set 1 (Chapters 1 and 2)

1) Choose the definition that gives the best overview of economics.

Economics is the social science that studies the choices _________.
   a) made by the military
   b) made by financial institutions
   c) that individuals, businesses, governments, and entire societies make as they cope with scarcity
   d) that we make when we trade in markets

2) Which of the following is NOT a macroeconomic question?
   a) Have we conquered inflation?
   b) Would a ceiling on the price of petrol create a shortage of gasoline?
   c) Why does Zimbabwe have high inflation?
   d) Would a tax cut bring an increase in total employment?

3) You plan to go to school this summer. If you do, you won’t be able to take your usual summer job that pays $6000 for the summer.

   The cost of tuition is $3000 and textbooks cost $300.
   You live with your family all year, which covers your living expenses of $1000.
   What is your opportunity cost of going to summer school?

4) Which of the following statements are normative and which are positive?
   a) All fast-food restaurants should sell healthy-choice meals.
   b) We ought to drive our cars less and take public transportation more.
   c) On average, Americans have a greater body mass index than citizens from any other country in the world.
   d) When the inflation rate rises, the unemployment rate falls.
5) The table shows Sunland’s production possibilities

<table>
<thead>
<tr>
<th>Food (kilograms per month)</th>
<th>Sunscreen (liters per month)</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
<td>and 0</td>
</tr>
<tr>
<td>100</td>
<td>and 400</td>
</tr>
<tr>
<td>50</td>
<td>and 600</td>
</tr>
<tr>
<td>0</td>
<td>and 800</td>
</tr>
</tbody>
</table>

a) Draw the four points defined in the table.

b) Draw the PPF through the four points. Label it.

c) If Sunland produces 100 kilograms of food per month, it must produce ________ liters of sunscreen to achieve production efficiency.

d) The opportunity cost of 1 kilogram of food is ________ liters of sunscreen.

e) The opportunity cost of 1 liters of sunscreen is 0.25 kilogram of food.

7) Kim can produce 40 pies per hour or 400 cakes per hour.

Liam can produce 100 pies per hour or 200 cakes per hour.

a) Kim’s opportunity cost of producing a pie is ____ cakes.

b) Liam’s opportunity cost of producing a pie is ____ cakes.

c) _____ has comparative advantage in producing pies.

d) _____ has comparative advantage in producing cakes.

e) Kim spends 30 minutes producing pies and 30 minutes producing cakes, Kim produces _____ pies and ____ cakes. If Liam spends 30 minutes producing pies and 30 minutes producing cakes, Liam produces ____ pies and ____ cakes.