Key to Exercise 02
Comparative Advantage

1. The following table shows the hours of labor required to produce one unit of each commodity in each country:

<table>
<thead>
<tr>
<th></th>
<th>Cloth (hours/yard)</th>
<th>Wine (hours/Gallon)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portugal</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>England</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

a. Is there a basis for trade? Explain.

Yes, there is a basis for trade, as though England has absolute advantage in both industries (1 versus 2 and 1 versus 3), her comparative advantage in Wine industry is higher ($1/3<1/2$). Hence, we expect Portugal to produce Cloth and England Wine.

b. Which country is expected to specialize in cloth production according to David Ricardo? In wine production?

We expect Portugal to produce Cloth and England to specialize in Wine.

c. What is opportunity cost of wine in terms of cloth in England? In Portugal?

In Portugal, $1W=1.5C$
In England, $1W=1C$
It is easy to see that Wine is cheaper in England, that makes England competitive.
d. Suppose that terms of trade is $1W=1.25C$. Does opening its economy into trade make England better off or not? Show.

Yes, trade (of Wine for Cloth) makes England better off, because each unit of Wine earns 0.25C extra via international trade.

e. Suppose that terms of trade is $1W=0.75C$. Which country is worse off by opening its economy into trade? Explain.

England is worse off at this terms-of-trade, as Wine industry makes 0.25C loss in this case.