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>1</td>
<td>4</td>
</tr>
<tr>
<td>England</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

a. Is there a basis for trade? Explain.

Yes there is a basis for trade because Adam Smith’s Absolute Advantage theorem does work in this question. More in particular, Portugal has absolute advantage in Cloth production and that England has absolute advantage in Wine production. Since the two countries have absolute advantage in two different industries, there is a basis for trade.

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

Portugal is expected to specialize in cloth production and England is expected to specialize in Wine production.
c. What is the opportunity cost of wine in terms of cloth in England? In Portugal?

In England: 1W=1.5C which reads, opportunity cost of one unit of Wine is 1.5 units of Cloths.
In Portugal: 1W=4C which reads, opportunity cost of one unit of Wine is 4 Cloths.

d. Suppose that terms of trade is 1W=2C. Does opening its economy into trade make England better off or not? Show.

Since England has absolute advantage in Wine production, and 1W is exchanged for 1.5C when the country stays autarkic; 1W=2C makes England better off. For each unit of Wine, England gains 0.5C extra units after England opens her country to trade.

e. Suppose that terms of trade is 1W=4.1C. Which country is reluctant to open its economy into trade? Explain.

Portugal would be reluctant to open its economy for trade in such a case because, when stayed closed, she would pay 4C to buy 1 unit of Wine. Why should it pay 0.1C units more?