Lab One: Earth-Sun Relationships  Lab Date and Time:

Names: ________________________________________________________________

1. Draw and label on the diagrams below according to Question #1.

2. June Solstice: Direct ___________ Tangential ___________
December Solstice: Direct: ___________ Tangential ___________
March Equinox: Direct: ___________ Tangential: ___________
September Equinox: Direct: ___________ Tangential: _______________
3. Graph the information from Figure 2 on the graph below. Choose any four of the given latitudes to graph and use different colors to denote different latitudes. Make a legend to show which color lines denote the four latitudes.
4.

<table>
<thead>
<tr>
<th>Location</th>
<th>Latitude</th>
<th>Sun Angle (show calculations)</th>
</tr>
</thead>
<tbody>
<tr>
<td>London</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perth, Australia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duluth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Antarctic Circle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ankara, Turkey</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buenos Aires</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. Today's date: _____________________________

Subsolar point for today: _____________________________

6. Use back of page or another sheet of paper.

7. _________________________________________________________________________

8. Use back of page or another sheet of paper.

9. Lat. 27°73'24" N, Long. 118°16'34" W
_____________________________________________________________________________

Lat. 43°18'04" E, Long. 154°22'19" N
_____________________________________________________________________________

Lat. 94°30'00"N, Long. 120°00'00" W
_____________________________________________________________________________