Trigonometry Review for Calculus Students
Name______________________________

Evaluating a trigonometric function is done in several steps.

Step 1: Write down the following table.

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>π/6</th>
<th>π/4</th>
<th>π/3</th>
<th>π/2</th>
</tr>
</thead>
<tbody>
<tr>
<td>sinx</td>
<td>0/2</td>
<td>1/2</td>
<td>√2/2</td>
<td>√3/2</td>
<td>2/2</td>
</tr>
<tr>
<td>cosx</td>
<td>2/2</td>
<td>√3/2</td>
<td>√2/2</td>
<td>1/2</td>
<td>0/2</td>
</tr>
</tbody>
</table>

Note that the table is built by listing angles in increasing order on the top row. Then, make each of the fractions have a 2 in the denominator. Then for the sine line, count up in your numerators (0,1,√2, √3, 2). For the cosine line, count down.

Step 2: For the angle given in your problem, recognize that the trig value of any angle is equal to that of the trig value of that angle’s reference. You may need to add in a negative sign.

Also remember that \( \tan x = \frac{\sin x}{\cos x} \), \( \sec x = \frac{1}{\cos x} \), \( \csc x = \frac{1}{\sin x} \) and \( \cot x = \frac{\cos x}{\sin x} \).

Evaluate the following:
1) \( \sin(\pi/3) \)

2) \( \cos(5\pi/6) \)

3) \( \sec(3\pi/4) \)
4) \( \tan(0) \)

5) \( \csc(\frac{5\pi}{3}) \)

6) \( \sin(\frac{3\pi}{2}) \)

7) \( \cot(\frac{11\pi}{6}) \)

8) \( \cos(\pi) \)

9) \( \tan(\frac{7\pi}{4}) \)

10) \( \sec(\frac{\pi}{6}) \)