4-5 Lesson Master

SKILLS Objective B
In 1-6, give exact values.
1. \( \sin \frac{11\pi}{4} \)  
2. \( \cos \frac{-8\pi}{3} \)  
3. \( \sin \frac{25\pi}{6} \)  
4. \( \cos (-585°) \)  
5. \( \sin 990° \)  
6. \( \cos 405° \)

PROPERTIES Objective C
7. Complete the following table.

<table>
<thead>
<tr>
<th>( f(\theta) = \sin \theta )</th>
<th>( g(\theta) = \cos \theta )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domain</td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td></td>
</tr>
<tr>
<td>Zeros</td>
<td></td>
</tr>
<tr>
<td>Period</td>
<td></td>
</tr>
<tr>
<td>Even, Odd, or Neither</td>
<td></td>
</tr>
</tbody>
</table>

8. For what values of \( x \) between 0 and \(-2\pi\) are both \( \cos x \) and \( \sin x \) negative?

9. One solution to the equation \( \sin \theta = 0.564 \) is \( \theta \approx 0.599 \). Find the two other solutions closest to this value at \( \theta \).

REPRESENTATIONS Objective I
In 10-15, identify which, if any, of the parent trigonometric functions have graphs with the given characteristic.
10. symmetry with respect to the origin
11. symmetry with respect to the \( x \)-axis
12. symmetry with respect to the \( y \)-axis
13. horizontal asymptotes
14. \( x \)-intercepts at integer multiples of \( \pi \)
15. \( y \)-intercept \(-1\)