Write neatly, show all work and simplify your answers as much as possible. Unclear answers or answers with no work will receive no points.

1. (7 points) Sketch the graph of \( y = 2 \csc(x - \pi) \). Include two full periods.

We first sketch \( y = 2 \sin(x - \pi) \)
- **Amplitude** = 1, \( |A| = 2 \)
- **Period** = \( \frac{2\pi}{1} = 2\pi \)
- **Phase Shift** = \( \frac{\pi}{1} = \pi \)
- **Quarter Period** = \( \frac{2\pi}{4} = \frac{\pi}{2} \)

<table>
<thead>
<tr>
<th>Start</th>
<th>Q.P.</th>
<th>H.P.</th>
<th>T.P.</th>
<th>F.P.</th>
</tr>
</thead>
<tbody>
<tr>
<td>( x = \pi + 0 \cdot \frac{\pi}{2} = \pi )</td>
<td>( x = \pi + 1 \cdot \frac{\pi}{2} = 3\pi/2 )</td>
<td>( x = \pi + 2 \cdot \frac{\pi}{2} = 2\pi )</td>
<td>( x = \pi + 3 \cdot \frac{\pi}{2} = 5\pi/2 )</td>
<td>( x = \pi + 4 \cdot \frac{\pi}{2} = 3\pi )</td>
</tr>
</tbody>
</table>

\( (\pi, 0) \) \( (3\pi/2, 2) \) \( (2\pi, 0) \) \( (5\pi/2, -2) \) \( (3\pi, 0) \)