Write the following in order of size starting with the smallest.

$$
\cos 90^{\circ} \quad \cos 100^{\circ} \quad \cos 300^{\circ}
$$

Justify your answer.

Answer:
$\cos 100^{\circ}, \cos 90^{\circ}, \cos 300^{\circ}$
The justification should use either the ASTC quadrant diagram or the graph of $y=\cos x$.

