79. We use the result of the problem 51 to solve for ψ. Note that $\phi = 60.0^\circ$ in our case. Thus, from

$$n = \frac{\sin \frac{1}{2}(\psi + \phi)}{\sin \frac{1}{2}\phi} \ ,$$

we get

$$\sin \frac{1}{2}(\psi + \phi) = n \sin \frac{1}{2}\phi = (1.31) \sin \left(\frac{60.0^\circ}{2} \right) = 0.655 \ ,$$

which gives $\frac{1}{2}(\psi + \phi) = \sin^{-1}(0.655) = 40.9^\circ$. Thus, $\psi = 2(40.9^\circ) - \phi = 2(40.9^\circ) - 60.0^\circ = 21.8^\circ$.