

**Answer for Question 50664, Math, Trigonometry:**  
 $\cos^{-1}(-x) = \arccos(-x) = \pi - \arccos(x) = \pi - \cos^{-1}(x).$

$$\begin{aligned}\sec^{-1}(-x) &= \operatorname{arcsec}(-x) = \arccos\left(-\frac{1}{x}\right) = \cos^{-1}\left(-\frac{1}{x}\right). \\ \operatorname{arcsec}(-x) &= A; \\ -x &= \sec A; \\ x &= -\sec A; \\ x &= -\frac{1}{\cos A}; \\ \cos A &= -\frac{1}{x}; \\ A &= \arccos\left(-\frac{1}{x}\right); \\ \operatorname{arcsec}(-x) &= \arccos\left(-\frac{1}{x}\right).\end{aligned}$$