To convert from radians to degrees, multiply the radian measure by $\frac{180^\circ}{\pi}$ and simplify:

$$-\frac{11\pi}{12} = -\frac{11\pi}{12} \cdot \frac{180^{\circ}}{\pi} = -\frac{11}{1} \cdot \frac{180^{\circ}}{12} =$$

$$-11 \cdot 15^{\circ} = -165^{\circ}$$