

$$\sec^2\left(\frac{\pi}{5}\right) - \tan^2\left(\frac{\pi}{5}\right) = \frac{1}{\cos^2\left(\frac{\pi}{5}\right)} - \frac{\sin^2\left(\frac{\pi}{5}\right)}{\cos^2\left(\frac{\pi}{5}\right)} = \frac{\cos^2\left(\frac{\pi}{5}\right)}{\cos^2\left(\frac{\pi}{5}\right)} = 1$$

Answer: $\sec^2\left(\frac{\pi}{5}\right) - \tan^2\left(\frac{\pi}{5}\right) = 1$