

**Exercise 124**

Evaluate the following functional values.

$$\tan\left(\frac{19\pi}{4}\right)$$

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**Solution**

Tangent is  $\pi$ -periodic, so

$$\begin{aligned}\tan\left(\frac{19\pi}{4}\right) &= \tan\left(\frac{19\pi}{4} - 3\pi\right) \\ &= \tan\left(\frac{7\pi}{4}\right) \\ &= -1.\end{aligned}$$