Warmup 4: Use the sum or difference formula to find the exact value of $\tan\frac{19\pi}{12} = \frac{3\pi}{12} + \frac{16\pi}{12}$

$$\tan\frac{19\pi}{12} = \tan\frac{\pi}{4} + \frac{4\pi}{3}$$

$$\tan(A+B) = \frac{\tan A + \tan B}{1 - \tan A \tan B}$$

$$\frac{\tan\frac{\pi}{4} + \tan\frac{4\pi}{3}}{1 - \tan\frac{\pi}{4}\cdot\tan\frac{4\pi}{3}} = \frac{1+\sqrt{3}}{1-1\cdot\sqrt{3}} = \frac{1+\sqrt{3}}{1-\sqrt{3}}\cdot\frac{(1+\sqrt{3})}{(1+\sqrt{3})}$$

$$= \frac{1+\sqrt{3}+\sqrt{3}+3}{1-3} = \frac{4+2\sqrt{3}}{-2} = \boxed{-2-\sqrt{3}} \quad \text{or} \quad \boxed{-\sqrt{3}-2}$$