5. $\tan\frac{3\pi}{8}$

$\frac{3\pi}{8}\cdot 2 = \boxed{\frac{3\pi}{4}}$

$\frac{3\pi}{8}\div 2 = \frac{3\pi}{8}\cdot\frac{1}{2} = \frac{3\pi}{16}$

$\tan\left(\frac{\frac{3\pi}{4}}{2}\right)$ ← 2

$\frac{1-\cos 2}{\sin 2}$

$= \frac{1-\cos\frac{3\pi}{4}}{\sin\frac{3\pi}{4}}$

$= \frac{1-\left(-\frac{\sqrt{2}}{2}\right)}{\frac{\sqrt{2}}{2}}$

$= \frac{\sqrt{2}+2}{\sqrt{2}}$

$= \frac{\sqrt{2}(2+\sqrt{2})}{\sqrt{2}\cdot\sqrt{2}}$

$= \frac{(2+\sqrt{2})\sqrt{2}}{2}$

$= \frac{2+\sqrt{2}\cdot 2}{2}$

$= \frac{|1+\sqrt{2}|}{1}$

$= \boxed{1+\sqrt{2}}$

ALT FORMULA $\sqrt{\frac{1-\cos 2\theta}{1+\cos 2\theta}}$

$\sqrt{\frac{1-(-\frac{\sqrt{2}}{2})}{1+(-\frac{\sqrt{2}}{2})}}$

$\sqrt{\frac{\sqrt{2}+2}{\sqrt{2}-2}}$

$\frac{\sqrt{\sqrt{2}+2}}{\sqrt{2-\sqrt{2}}}\cdot\frac{\sqrt{2-\sqrt{2}}}{\sqrt{2-\sqrt{2}}}$

$\frac{\sqrt{4-2}}{2-\sqrt{2}}$

$\frac{\sqrt{2}}{2-\sqrt{2}}$

$\frac{\sqrt{2}+2}{\sqrt{2}-2}\cdot\frac{\sqrt{2}-2}{\sqrt{2}-2}$

$\frac{2+2\sqrt{2}+2}{2-4}$

$\frac{4+2\sqrt{2}}{-2}$

$\frac{|1+\sqrt{2}|}{1}$

$\boxed{1+\sqrt{2}}$