$$\left\{ ctg\left(\frac{3\pi}{2}+x\right) = -tg\,x \right.$$

$\therefore$

$$\frac{\sin(\pi-x)\cos(\pi+x)\,tg(2\pi-x)}{\sec\left(\frac{\pi}{2}+x\right)\csc\left(\frac{3\pi}{2}-x\right)ctg\left(\frac{3\pi}{2}+x\right)} =$$

$$= \frac{\sin x\,(-\cos x)\,(-tg\,x)}{-\frac{1}{\sin x}\cdot\left(-\frac{1}{\cos x}\right)\cdot(-tg\,x)}$$

$$= -\sin^2 x\,\cos^2 x$$

$$= -\sin^2 x\,(1-\sin^2 x)$$

$$= -\sin^2 x + \sin^4 x$$

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26) $$\frac{\sin 2x}{1+\cos 2x} = tg\,x$$

$\therefore$

$$\frac{\sin 2x}{1+\cos 2x} = \frac{2\sin x\cos x}{1+(2\cos^2 x-1)}$$

$$= \frac{2\sin x\cos x}{2\cos^2 x}$$

$$= \frac{\sin x}{\cos x} = tg\,x$$