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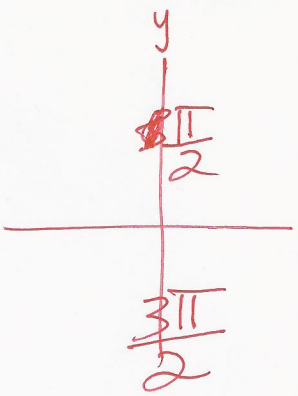
$$\csc\left(6b+\frac{\pi}{8}\right)=\sec\left(2b-\frac{\pi}{8}\right)$$



$$\frac{1}{\sin\left(6b+\frac{\pi}{8}\right)}=\frac{1}{\cos\left(2b-\frac{\pi}{8}\right)}$$

$$\sin\left(6b+\frac{\pi}{8}\right)=\cos\left(2b-\frac{\pi}{8}\right)$$

$$\sin\left(\frac{\pi}{2}-\frac{3\pi}{8}+6b\right)=\cos\left(2b-\frac{\pi}{8}\right)$$

$$\sin\left(\frac{\pi}{2}-\left(\frac{3\pi}{8}-6b\right)\right)=\cos\left(2b-\frac{\pi}{8}\right)$$

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$$\cos\left(\frac{3\pi}{8}-6b\right)=\cos\left(2b-\frac{\pi}{8}\right)$$

$\frac{\pi}{2}$ – sm+h $=\frac{\pi}{8}$

$\frac{\pi}{2}-\frac{\pi}{8}=$

$=\frac{4\pi}{8}-\frac{\pi}{8}$

$=\frac{3\pi}{8}.$

$$\frac{3\pi}{8}-6b=2b-\frac{\pi}{8}$$

$$\frac{3\pi}{8}+\frac{\pi}{8}=6b+2b$$

$$\frac{4\pi}{8}=8b$$

$$\frac{\pi}{2}=8b$$

$$b=\frac{\pi}{16}$$