$$log_{16}\left(1+cos\frac{\pi}{8}\right)+log_{16}\left(1-cos\frac{\pi}{8}\right)+2log_{16}cos\frac{\pi}{8}=log_{16}\left(\left(1+cos\frac{\pi}{8}\right)\left(1-cos\frac{\pi}{8}\right)\right)+log_{16}cos^2\frac{\pi}{8}=$$

$$=log_{16}\left(1-cos^2\frac{\pi}{8}\right)+log_{16}cos^2\frac{\pi}{8}=log_{16}sin^2\frac{\pi}{8}+log_{16}cos^2\frac{\pi}{8}=log_{16}\left(sin^2\frac{\pi}{8}\cdot cos^2\frac{\pi}{8}\right)=$$

$$=log_{16}\left(\frac{1}{4}\cdot 4\cdot sin^2\frac{\pi}{8}\cdot cos^2\frac{\pi}{8}\right)=log_{16}\left(\frac{1}{4}\cdot sin^2\frac{\pi}{4}\right)=log_{16}\left(\frac{1}{4}\cdot\left(\frac{\sqrt{2}}{2}\right)^2\right)=log_{16}\left(\frac{1}{4}\cdot\frac{2}{4}\right)=$$

$$=log_{16}\frac{1}{8}=log_{2^4}2^{-3}=\frac{1}{4}\cdot(-3)=-\frac{3}{4}$$