

$$\cos 2\alpha + \sin 2\alpha = 2\cos^2\alpha - 1 + 2\sin\alpha\cos\alpha = 2\cos^2\alpha - 1 + 2 \cdot 0,75 \cos^2\alpha =$$

$$\operatorname{tg} \alpha = \frac{\sin \alpha}{\cos \alpha} = 0,75 \Rightarrow \sin \alpha = 0,75 \cos \alpha$$

$$\sin^2 \alpha = \frac{9}{16} \cos^2 \alpha \Rightarrow$$

$$\Rightarrow 1 - \cos^2 \alpha = \frac{9}{16} \cos^2 \alpha \Rightarrow 1 = \frac{25}{16} \cos^2 \alpha \Rightarrow \cos^2 \alpha = \frac{16}{25}$$

$$= 0,5 \cos^2 \alpha - 1 = \frac{1}{2} \cdot \frac{16}{25} - 1 = \frac{8}{25} - 1 = -\frac{17}{25}$$

$$= -\frac{3}{5}$$