

ДЗ

$$(\sin x + \cos x)/\cos x + 3\sin 2x = \cos^2 2x + \operatorname{tg} x$$

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$$\sin x/\cos x + \cos x/\cos x + 3\sin 2x = \cos^2 2x + \sin x/\cos x$$

$$\sin x/\cos x + 1 + 3\sin 2x = \cos^2 2x + \sin x/\cos x$$

$$1 + 3\sin 2x = \cos^2 2x$$

$$\cos^2 2x - 3\sin 2x - 1 = 0$$

$$\cos^2 2x = 1 - \sin^2 2x$$

$$1 - \sin^2 2x - 3\sin 2x - 1 = 0$$

$$\sin^2 2x + 3\sin 2x = 0$$

$$\sin 2x = t$$

$$t^2 + 3t = 0$$

$$t_1 = 0$$

$$t_2 = -3$$

$$\sin 2x = 0$$

$$\sin 2x = -3 \text{ Нет решений}$$

$$2x = Pn$$

$$x = Pn/2$$

Ответ: Pn

$$\begin{aligned}\cos x &\neq 0 \\ x &\neq P/2 + Pn\end{aligned}$$

$$\begin{aligned}V(x) + x + 5 &= V(x) \\ x + 5 &= 0 \\ x &= -5 \\ x &\geq 0\end{aligned}$$

