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③ $A=\lim\limits_{x\to 0}\dfrac{(1-x)^{x^2}-(1+x)^{-x^2}}{\sqrt{1-x^2}-\cos x}$

знаменател: $\lim\limits_{x\to 0} g(x)=\dfrac{(\sqrt{1-x^2}\overset{+1-1+\frac{x^2}{2}-\frac{x^2}{2}}{-\cos x})\cdot x^4}{x^4}=$

I $\lim \dfrac{\sqrt{1-x^2}-1+\frac{x^2}{2}}{x^4}=-\dfrac{1}{8}$

II $\lim \dfrac{1-\cos x-\frac{x^2}{2}}{x^4}\overset{①}{=}\dfrac{\sin x-x}{4x^3}\overset{①}{=}\dfrac{\cos x-1}{12x^2}=-\dfrac{1}{24}$

$\Rightarrow$ знаменател $\Rightarrow \lim\limits_{x\to 0}=-\dfrac{1}{8}\cdot\dfrac{1}{24}=-\dfrac{1}{6}$

$A=-6\lim\limits_{x\to 0}\dfrac{e^{x^2\ln(1-x)}-e^{-x^2\ln(1+x)}}{x^4}=$

$=-6\lim\limits_{x\to 0}\dfrac{e^{-x^2\ln(1+x)}\cdot(e^{x^2\ln(1-x^2)}-1)}{x^4}=\longrightarrow$

$\to ①$

$\lim\limits_{x\to 0}\dfrac{(e^{x^2\ln(1-x^2)}-1)\cdot x^2\ln(1-x^2)}{x^4\cdot x^2\cdot\ln(1-x^2)}=\dfrac{x^2\cdot\ln(1-x^2)\cdot x^2\ln(1-x^2)}{x^4\cdot}$ ...

$$= -6 \cdot \lim_{x\to 0} \frac{e^{x^2 \ln(1-x^2)} - 1}{x^2 \cdot \ln(1-x^2)} \cdot \frac{\ln(1-x^2)}{x^2} =$$

$$\sim (1) \qquad \sim (-1)$$

$$= -6 \cdot (-1) = \underline{\underline{6}}$$