

2.80
(2) 5

$$\arctan(2+gx) - \arctan(1+gx) = \frac{\pi}{4}$$

алгоритм от $\tan \sqrt{y}$ · x/5 : $\tan \alpha - \tan \beta$

$$\tan[\arctan(2+gx) - \arctan(1+gx)] = \tan \frac{\pi}{4}$$

$\tan(\alpha - \beta)$ $\tan \alpha - \tan \beta$

$$\frac{\tan(\arctan(2+gx)) - \tan(\arctan(1+gx))}{1 + \tan(\arctan(2+gx)) \cdot \tan(\arctan(1+gx))} = 1$$

$$1 = \frac{2+gx - 1-gx}{1 + (2+gx)(1+gx)} = \frac{1}{1 + 2 + 3gx + g^2x}$$

$$1 = 3 + 3gx + g^2x \rightarrow g^2x + 3gx + 2 = 0$$

$gx = 2 \rightarrow \text{не}$
 $gx = 1 \rightarrow \boxed{x = 2\sqrt{k} + \pi}$