

$$\begin{cases} \operatorname{tg}x \cdot \operatorname{tg}z = 3 \\ \operatorname{tgy} \cdot \operatorname{tg}z = 6 \\ x + y + z = P \end{cases}$$

$$\frac{P}{2}$$

$$\begin{aligned} \operatorname{tg}x &\leftrightarrow \operatorname{ctg} \\ \operatorname{Sin} &\leftrightarrow \operatorname{Cos} \end{aligned}$$

$$P \cos x P$$

$$\approx 10 - 10$$

$$(0; \frac{P}{2})$$

$$\begin{aligned} z &= P - x - y \\ \operatorname{tg}x \cdot \operatorname{tg}(P - x - y) &= 3 \\ \operatorname{tgy} \cdot \operatorname{tg}(P - x - y) &= 6 \end{aligned}$$

$$\begin{aligned} -\operatorname{tg}x \cdot \operatorname{tg}(x + y) &= 3 \\ -\operatorname{tgy} \cdot \operatorname{tg}(x + y) &= 6 \end{aligned}$$

$$\begin{aligned} \operatorname{tg}x / \operatorname{tgy} &= 1/2 \\ \operatorname{tgy} &= 2\operatorname{tg}x \end{aligned}$$

$$-\operatorname{tg}x(\operatorname{tg}x + 2\operatorname{tg}x) / (1 - \operatorname{tg}x \cdot 2\operatorname{tg}x) = 3$$

$$\operatorname{tg}x = t$$

$$\begin{aligned} -t(t + 2t) / (1 - t \cdot 2t) &= 3 \\ -t^2 - 2t^2 / 1 - 2t^2 &= 3 \\ -t^2 - 2t^2 = 3 - 6t^2 \\ 3t^2 - 3 &= 0 \\ t^2 &= 1 \end{aligned}$$

$$t = \pm 1$$

$$\operatorname{tg}x = \pm 1$$

$$x = P/4 + pk$$

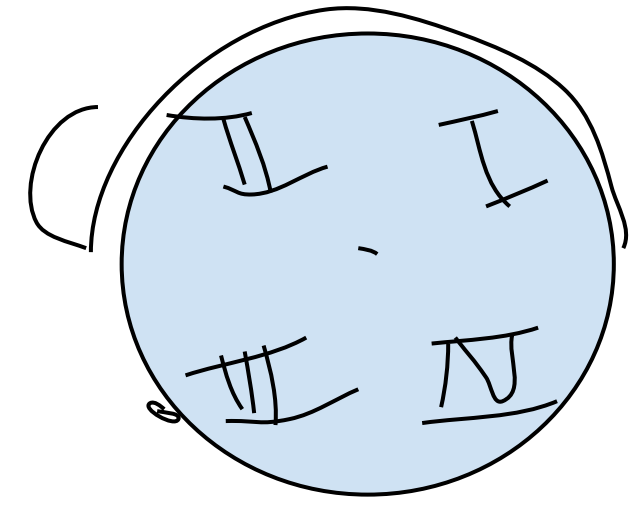
$$x = 3P/4 + pk$$

$$\operatorname{tgy} = \pm 2$$

$$y = \operatorname{arctg}(\pm 2) + pn$$

$$z = P - P/4 + pk - \operatorname{arctg}(\pm 2) + pn$$

Ответ: $(P/4 + pk; \operatorname{arctg}(+2) + pn; P - P/4 + pk - \operatorname{arctg}(+2) + pn); (3P/4 + pk; \operatorname{arctg}(-2) + pn; P - P/4 + pk - \operatorname{arctg}(-2) + pn)$



$$\begin{aligned} \operatorname{tg}(x + y) &= \frac{\sin(x + y)}{\cos(x + y)} = \frac{(\sin x \cdot \cos y + \sin y \cdot \cos x)}{(\cos x \cdot \cos y - \sin y \cdot \sin x)} = \\ &= \frac{(\sin x \cdot \cos y + \sin y \cdot \cos x)}{\cos x \cos y} / \frac{(\cos x \cdot \cos y - \sin y \cdot \sin x)}{\cos x \cos y} = \\ &= \frac{\sin x / \cos x + \sin y / \cos y}{1 - \sin y \cdot \sin x / \cos x \cos y} = \frac{\operatorname{tg}x + \operatorname{tgy}}{1 - \operatorname{tg}(x) \cdot \operatorname{tgy}} \end{aligned}$$

$$\operatorname{tg}(x + y) = (\operatorname{tg}x + \operatorname{tgy}) / (1 - \operatorname{tg}x \cdot \operatorname{tgy})$$