

$$\begin{aligned}\sin(2x + \sin^2 y) &= 0 \\ x - 3\sin^2 y &= -2\end{aligned}$$

$$\begin{aligned}2x + \sin^2 y &= Pk \\ \sin^2 y &= Pk - 2x \\ \sin^2 y &= (2+x)/3 \\ Pk - 2x &= (2+x)/3 \\ 3Pk - 6x - 2x &= 0 \\ 3Pk - 7x - 2 &= 0 \\ x &= (3Pk - 2)/7\end{aligned}$$

$$\begin{aligned}0 &\leq (2+x) \leq 3 \\ -2 &\leq x \leq 1\end{aligned}$$

$$-14 \leq (3Pk - 2) \leq 7$$

$$-12 \leq 3Pk \leq 9$$

$$-4 \leq Pk \leq 3$$

$$k = -1, 0$$

$$x_1 = (-3P - 2)/7$$

$$x_2 = -2/7$$

1.

$$\sin^2 y = ((12 - 3P)/7)/3 = (4 - P)/7$$

$$(1 - \cos 2y)/2 = (4 - P)/7$$

$$7 - 7\cos 2y = 8 - 2P$$

$$\cos 2y = (2P - 1)/7$$

$$2y = \pm \arccos((2P - 1)/7) + 2Pn \Rightarrow y_1 = \pm 1/2 \arccos((2P - 1)/7) + Pn$$

2.

$$\sin^2 y = (2 - 2/7)/3 = 12/7/3 = 4/7$$

$$(1 - \cos 2y)/2 = 4/7$$

$$1 - \cos 2y = 8/7$$

$$\cos 2y = 1 - 8/7 = -1/7$$

$$y_2 = \pm 1/2 \arccos(-1/7) + Ph$$

Ответ: $((-3P - 2)/7; \pm 1/2 \arccos((2P - 1)/7) + Pn)$ $(-2/7; \pm 1/2 \arccos(-1/7) + Ph)$