

$$7\sin t - 8\sin^3 t = 0$$

$$8\cos^3 t - 7\cos t = 0$$

$$\sin 3t = 3\sin t - 4\sin^3 t$$

$$\sin t = 6\sin t - 8\sin^3 t$$

$$8\sin^3 t - 7\sin t = 0$$

$$\sin t(8\sin^2 t - 7) = 0$$

$$\sin t = 0$$

$$t = \pi k$$

$$8\sin^2 t = 7$$

$$\sin^2 t = 7/8$$

$$\sin t = \sqrt{7/8}$$

$$t = \arcsin(\sqrt{7/8}) + 2\pi k$$

$$t = \pi - \arcsin(\sqrt{7/8}) + 2\pi k$$

$$8\cos^3 t - 7\cos t = 0$$

$$\cos t(8\cos^2 t - 7) = 0$$

$$\cos t = 0$$

$$t = \pi/2 + \pi k$$

$$8\cos^2 t = 7$$

$$\cos t = \sqrt{7/8}$$

$$t = \pm \arccos(\sqrt{7/8}) + 2\pi k$$

Ответ: нет решений

