

2.71
S

$$8 \sin^6\left(\frac{x}{2}\right) + g^3 x - g 2x = 0$$

$$8 \sin^6\left(\frac{x}{2}\right) + g^3 \left(2 \cdot \frac{x}{2}\right) - g 2x = 0$$

$$8 \sin^6\left(\frac{x}{2}\right) + (1 - 2 \sin^2 \frac{x}{2})^3 - 6s 2x = 0$$

$$8 \sin^6\left(\frac{x}{2}\right) + 1 - 6 \sin^2\left(\frac{x}{2}\right) + 12 \sin^4\left(\frac{x}{2}\right) - 8 \sin^6\left(\frac{x}{2}\right) - g 2x = 0$$

$$1 - g 2x - 6 \sin^2\left(\frac{x}{2}\right) \left[1 - 2 \sin^2\left(\frac{x}{2}\right)\right] = 0$$

$$1 - (1 - 2 \sin^2 x) - 6 \sin^2\left(\frac{x}{2}\right) g x = 0$$

$$2 \sin^2 x - 6 \sin^2\left(\frac{x}{2}\right) g x = 0$$

$$2 \sin^2\left(2 \cdot \frac{x}{2}\right) - 6 \sin^2\left(\frac{x}{2}\right) g x = 0$$

$$8 \sin^2\left(\frac{x}{2}\right) g^2\left(\frac{x}{2}\right) - 6 \sin^2\left(\frac{x}{2}\right) g x = 0$$

$$2 \sin^2\left(\frac{x}{2}\right) \left[4 g^2\left(\frac{x}{2}\right) - 3 g x\right] = 0$$

$$4 g^2\left(\frac{x}{2}\right) - 2 - 3 g x = -2$$

$$2 g x - 3 g x = -2$$

$$-g x = -2$$

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$$\frac{x}{2} = \pi k$$

$$x = 2\pi k$$