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$$A(x) = E_0 \sqrt{1 + p^2 + 2p \cos(2k_1 x)}^{\frac{1}{2}}$$

The max amplitude will be at x positions that maximize the cosine

$$\cos(2k_1 x) = 1$$

$$2k_1 x = n\pi$$

$$x = \frac{n\pi}{2k_1}$$

$$n = 0, 1, 2, 3, \dots$$

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