

Example 3-8: Sometimes the fundamental period is not obvious. For example, the signal $x(t) = \cos^2(4\pi t)$ has a period of 0.5 s, but its fundamental period is actually $T_0 = 0.25$ s; because

$$\cos^2\left(4\pi\left(t + \frac{1}{4}\right)\right) = \cos^2(4\pi t + \pi) = \cos^2(4\pi t)$$

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