

Quiz: Cosines with Common Periods

Quiz: Which collection of cosine functions all have period 2π ?

Choices:

a) $\cos(t), \cos(t/2), \cos(t/3), \dots$

b) $\cos(\pi t), \cos(2\pi t), \dots$

c) $\cos(t), \cos(2t), \cos(3t), \dots$

Answer: (c).

For $n = 1, 2, 3, \dots$, $\cos(nt)$ has period 2π (and base period $2\pi/n$).

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