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EPI-STEM

Calculus: Derivatives of $\sin x$ and $\cos x$

Suitable for Senior Cycle

NARRATOR: Gemma Henstock, EPI-STEM

THIS IS A HEA FUNDED CPD PROJECT WITH EPI-STEM:

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Derivatives of Trigonometric Functions

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$f(x)$	$f'(x)$
x^n	nx^{n-1}
$\ln x$	$\frac{1}{x}$
e^x	e^x
e^{ax}	ae^{ax}
a^x	$a^x \ln a$
$\cos x$	$-\sin x$
$\sin x$	$\cos x$
$\tan x$	$\sec^2 x$
$\cos^{-1} \frac{x}{a}$	$-\frac{1}{\sqrt{a^2 - x^2}}$
$\sin^{-1} \frac{x}{a}$	$\frac{1}{\sqrt{a^2 - x^2}}$
$\tan^{-1} \frac{x}{a}$	$\frac{a}{a^2 + x^2}$



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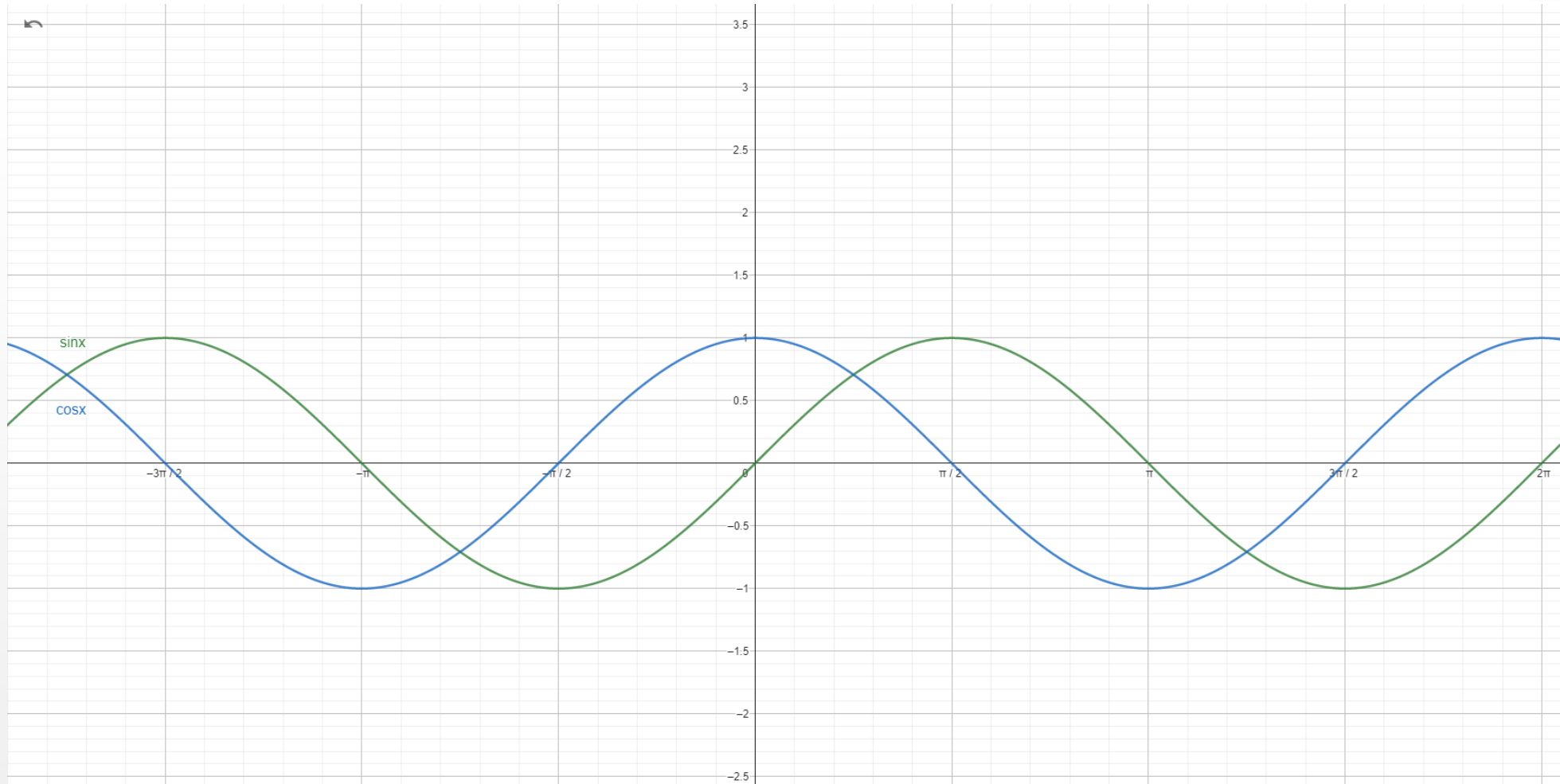


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Why is the derivative of $\sin x \Rightarrow \cos x$?

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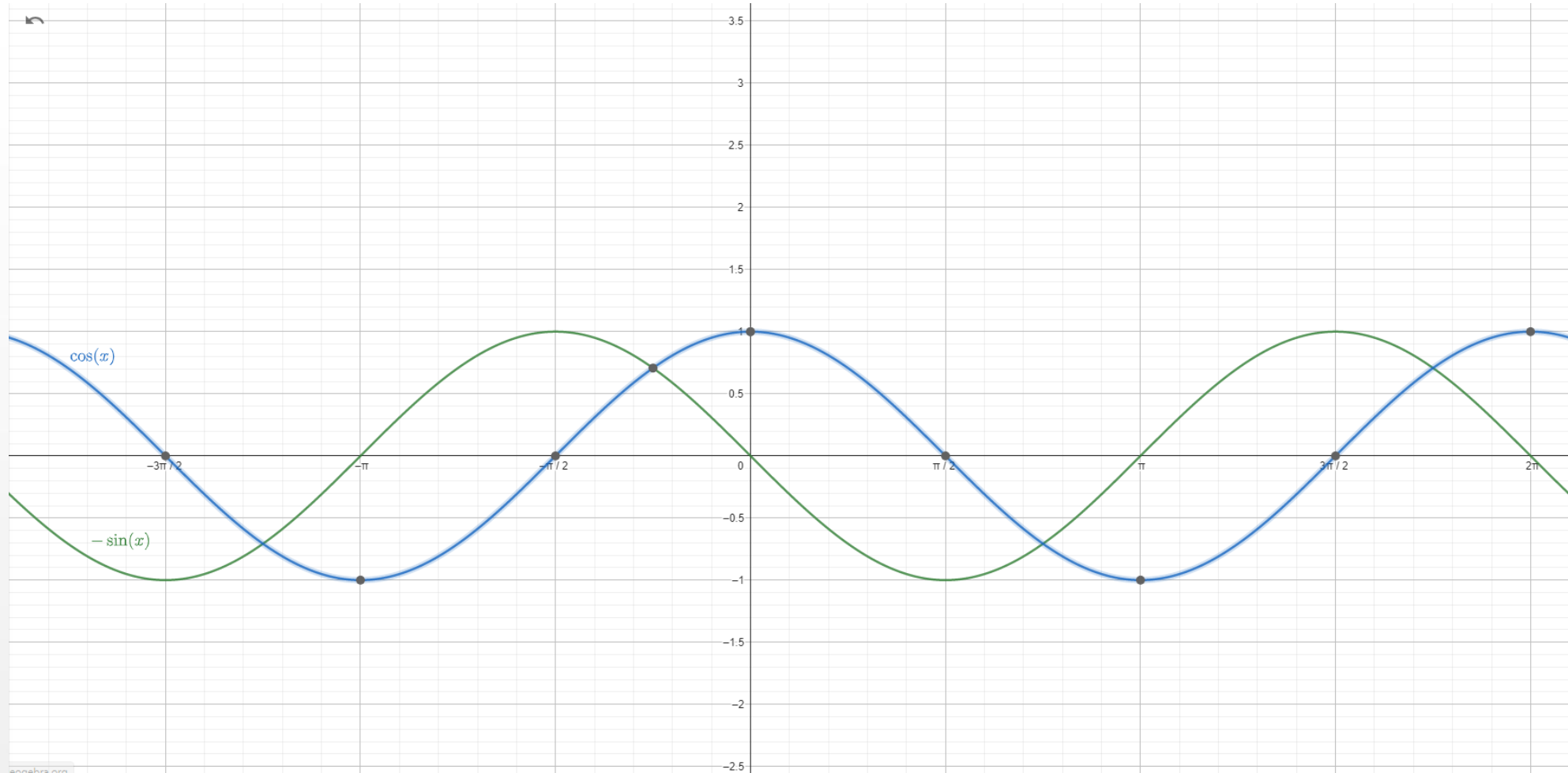


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Why is the derivative of $\cos x \Rightarrow -\sin x$?

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Contact Details

The logo for EPI-STEM, featuring the text "EPI-STEM" in white capital letters on a yellow and green banner.

Register for on-line CPD resources: <https://epistem.ie>

EPI•STEM project: [Resources](#)

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This on-line CPD project [HEA funded] is an initiative with EPI•STEM for science and mathematics secondary teachers in Ireland. The research-led development team include:

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