

Apply

6. Match each function with its graph.

a) $y = 3 \cos x \rightarrow \textcircled{A}$

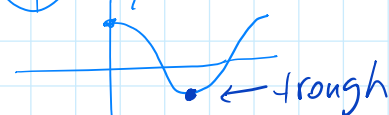
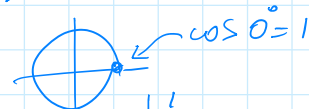
b) $y = \cos 3x$

c) $y = -\sin x$

d) $y = -\cos x \rightarrow \textcircled{B}$

only one w/ amplitude 3 $\rightarrow \textcircled{A}$

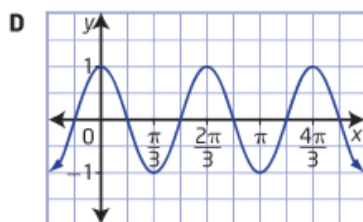
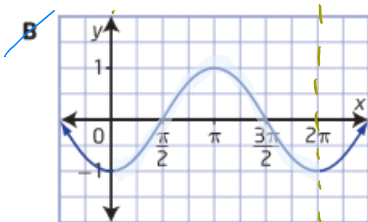
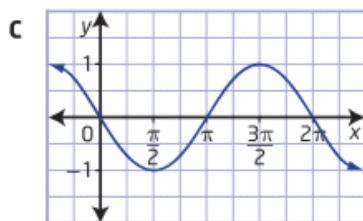
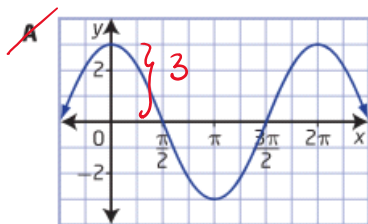
$\cos x$ starts at 1



if u flip it it will be at -1 become peak when flipped



could be B or D but D is stretched. so it's B



you should only have one peak in $\cos x$ and in $-\cos x$.

6. a) A b) D c) C d) B

Apply

6. Match each function with its graph.

a) $y = 3 \cos x$

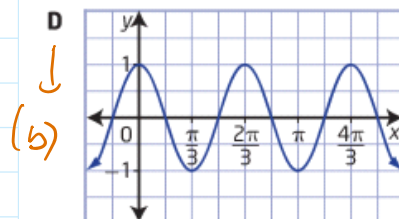
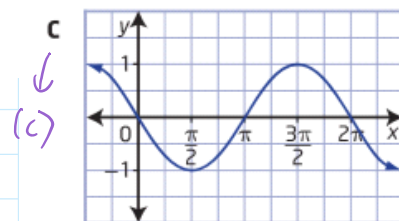
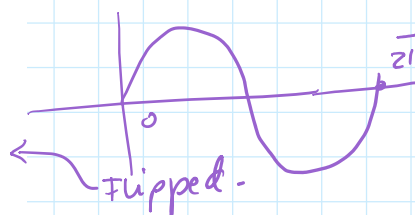
b) $y = \cos 3x$

c) $y = -\sin x$

d) $y = -\cos x$

stretched horizontally

normal $\sin x$:



not stretched
 $\downarrow$
has 1 period over $[0, 2\pi]$

too many peaks inside 2π

... is 4 periods of $\cos x$ &

too many peaks inside 2π
which is the period of $\cos x$ &
 $\sin x$
this is for sure stretched. $\Rightarrow$ can only be (b)