

6.1 (p411) #14

Verify $y = e^{-\cos x}$ is a solution
to $y' = y \sin x$ and goes through
 $y(\frac{\pi}{2}) = 1$.

Take derivative of y : $y' = e^{-\cos x} (\sin x)$

Note $y = e^{-\cos x}$

So $y' = y \sin x \checkmark$

Next: $y(\frac{\pi}{2}) = e^{-\cos(\frac{\pi}{2})} = e^0 = 1 \checkmark$