Symmetry and Odd/Even

Quiz – Advanced

1.) State whether function is odd, even or neither and determine Symmetry

a.) \( y = \cos x \)
   \[ y = \cos(-x) \]
   \[ y = \cos x \]
   So, even, symmetric about y-axis

b.) \( x = y^2 \)
   \[ x = (-y)^2 \]
   \[ x = y^2 \]
   Symmetric about x-axis

c.) \( y = (\sin x)^2 \)
   \[ y = (\sin(-x))^2 \]
   \[ (-\sin x)^2 \]
   \[ = \sin^2 x \]
   So, symmetric about y-axis 
   even