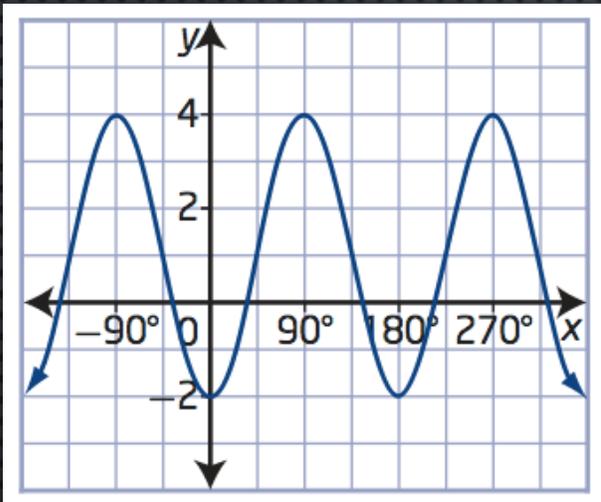


# MISSION D: BREAK THE CODE

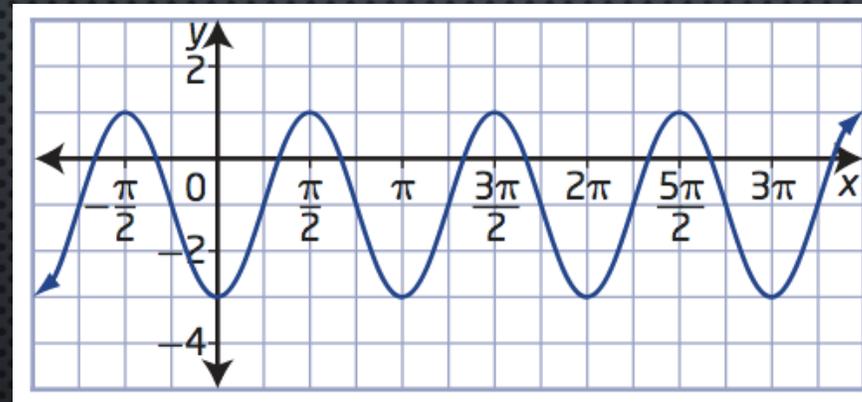
THIS MISSION REQUIRES YOU TO ENTER ALBERT EINSTEIN MANSION TO RECOVER A LOST ARTIFACT. HOWEVER, THE SECURITY CODE IS A PERPLEXING SET OF SINUSOIDAL GRAPHS WITH QUESTIONS ATTACHED.



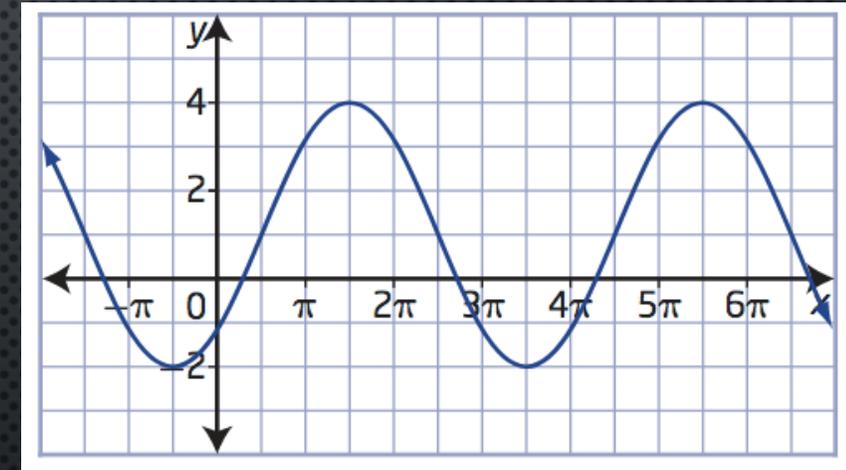
It's your mission to solve the graphs to decode the security system.



form  $y = a \cos b(x - c) + d$ .



form  $y = a \sin b(x - c) + d$



form  $y = a \sin b(x - c) + d$

- I. DETERMINE THE EQUATION FOR EACH GRAPH IN THE FORM LISTED BELOW THE GRAPH.
- II. FIND THE Y VALUE FOR EACH GRAPH WHEN  $x = \frac{4\pi}{3}$ .
- III. THE SUM OF ALL THE Y VALUES IS THE CODE TO ENTER ALBERT EINSTEIN MANSION. (ANSWER TO 1 DECIMAL PLACE)