# Calculus    Class Worksheet #2   Unit 12    _____
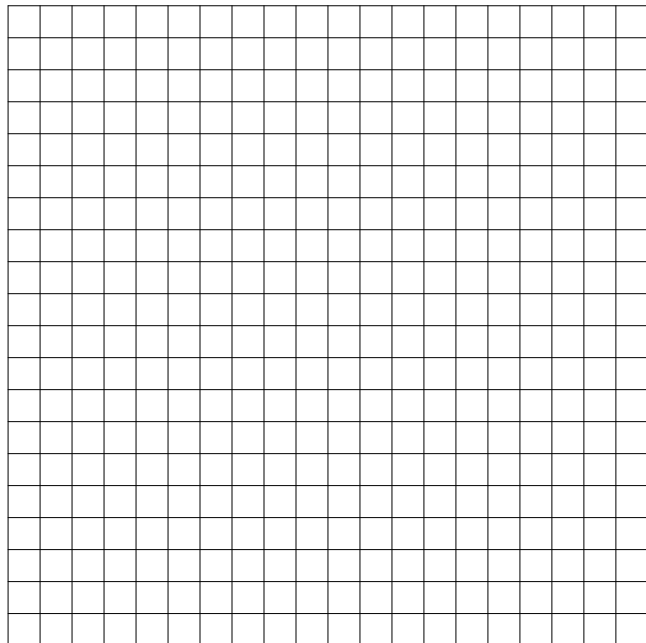
In each of the following problems, you are given a function $y = f(x)$ and two values of x, $x = a$ and $x = b$.  You are to find the length of the graph of $y = f(x)$ from the point $(a, f(a))$ to the point $(b, f(b))$.  In each case, draw a graph showing the 'curve' from $x = a$ to $x = b$.  Express your answers rounded to 3 significant figures.

1.  $y = f(x) = 4x - x^2$ ; $a = -1$ ; $b = 3$.

2.  $y = f(x) = \cos x$ ; $a = \pi/2$ ; $b = \pi$.