

Section 2.1 – Introduction to Sine and Cosine Graphs

**Objective:** Discover by pointwise plotting what the graphs of  $y = \sin \theta$  and  $y = \cos \theta$  look like.

So far, you have defined the six trigonometric functions, learned how to find values of them, and used them to solve right triangle problems. What you have not done is look at the graphs of the trigonometric functions. In Chapter 2 you will discover what the graphs of the six trigonometric functions look like.

Whenever you are asked to draw the graph of an unfamiliar function, you create a list of points for the function and then plot these points one-by-one (pointwise plotting). You determine points and plot enough of them to detect a pattern. Then you connect the points with a line or a smooth curve.

The exercises in this section will help you to determine what the graphs of the sine and cosine functions look like.