## 5.5 Transformations of Trigonometric Graphs

Use Derive for Windows to quickly graphs the functions below. Use a new 2D-plot window for each number. Make a quick sketch of the graphs below each number so you have a record. Label each function so you can tell them apart.

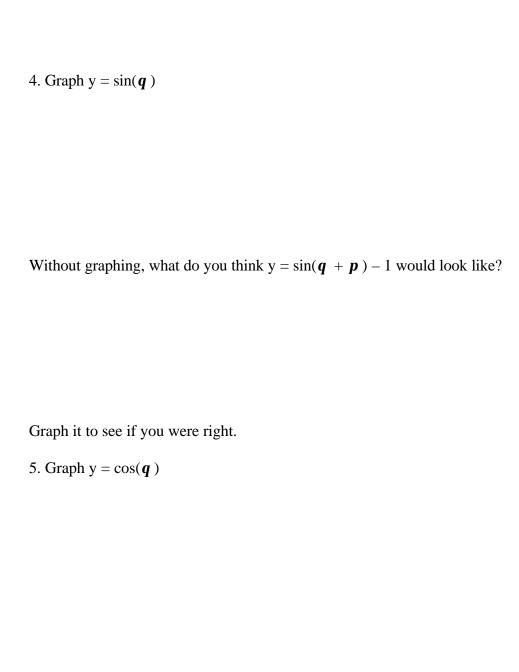
1. Graph 
$$y = \sin(\boldsymbol{q})$$
,  $y = \sin(\boldsymbol{q} + \boldsymbol{p})$ , and  $y = \sin(\boldsymbol{q}) + 1$ 

2. Graph 
$$y = \tan (\mathbf{q})$$
 and  $y = \tan (\mathbf{q} - \mathbf{p}/4)$ 

3. Graph 
$$y = \csc(q)$$

Without graphing, what do you think  $y = \csc(q + p)$  would look like?

Graph it and see if you were right.



Without graphing, what do you think y = cos(q - p/2) would look like?

Graph it to see if you were right. Does this graph look familiar? How so?