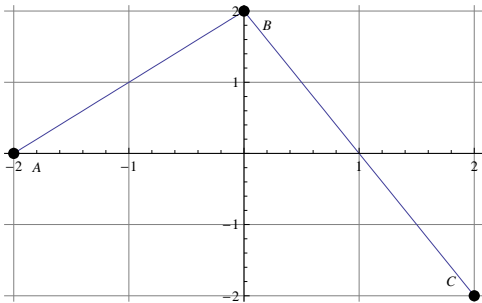


Assignment #3

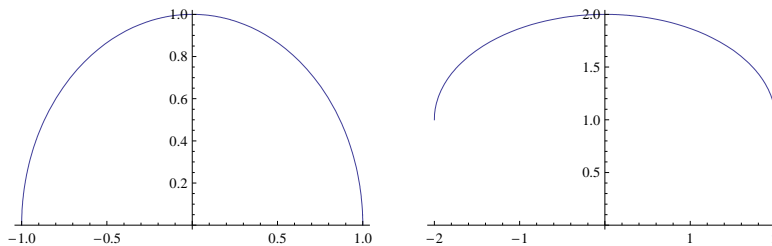
Name \_\_\_\_\_

Due 25 September 2009

1. The graph of a function  $f$  is given below. Sketch the graph of  $y = \frac{1}{2}f(x-1) + 2$ . Indicate the locations of the points  $A$ ,  $B$ , and  $C$  under this transformation.



2. The graph of  $y = f(x) = \sqrt{1-x^2}$  is shown below on the left. On the right is a transformation of this graph; find an expression for this transformed function.



3. Let  $f(s) = \frac{s+2}{2s+3}$  and  $g(s) = \frac{3s+5}{8s+4}$ . Find simple expressions for  $f \circ g$  and  $g \circ f$ .