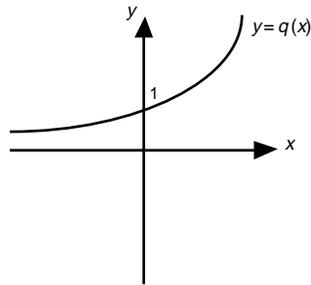# *In Class Exercises* (*ICE*) - *12/4/00*

1.   Draw the graph of the **function**.

2.   Draw in the line $y = x$ on the graph of the function.

3.   Using the line $y = x$ as a mirror, reflect the graph of the function.

4.   The graph obtained from reflecting is the graph of the inverse.

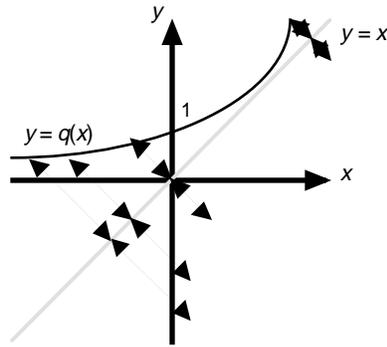***Example***   Draw the graph of the inverse of the function : $q(x) = 3^x$

Solution   <u>**Step 1 :**</u> The graph of the function resembles :
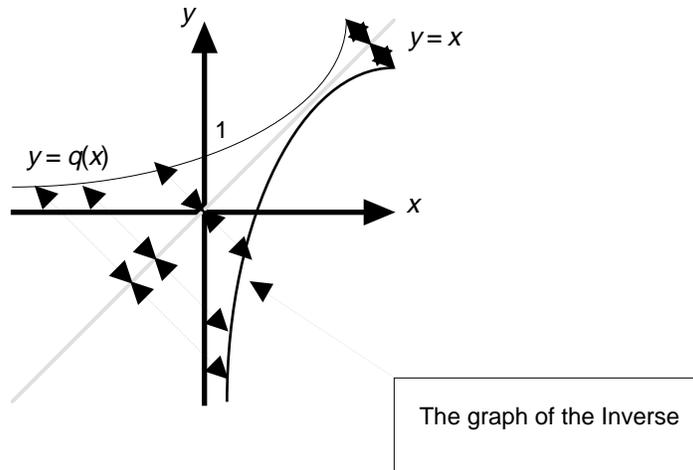

<u>**Step 2 :**</u> Adding the line $y = x$:
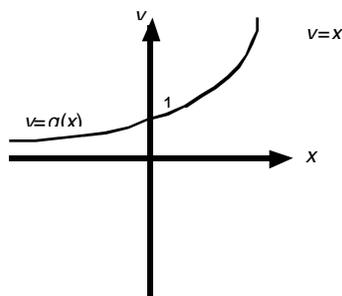
Step 3 : Generate some points for the new graph by reflecting across the line $y = x$:

Now draw in a curve that passes through these points :

The graph of the Inverse

- **Use the axes provided below to sketch the graph of $f(x) = 10^x$ and the graph of the inverse.**