Math 120  
Autumn 1999  
Quiz 4

Instructions:

- You will have 30 minutes.
- Closed book, but you are allowed one page of notes (both sides) in your own handwriting.
- You must SHOW YOUR WORK to receive credit.
- Give exact answers to all problems. For example, if the answer to a problem is \( \frac{1}{3} \) or \( \sqrt{2} \), do not write .33 or 1.414, etc. If you wish to give a decimal approximation after your exact answer, that’s okay.
- The point value of each problem is shown in parentheses to the left.

1. The graph of the function \( f \) is shown below.

For each function given below, sketch the graph in the given coordinate system and give the domain and range. To maximize your partial credit, you should show at least one intermediate graph which you use to obtain your final graph.
(6) (a) $y = 2f(-x)$

(2) Domain: $\leq x \leq$

(2) Range: $\leq y \leq$

(6) (b) $y = f(2x - 1)$

(2) Domain: $\leq x \leq$

(2) Range: $\leq y \leq$