

Math 115 Section 03 (Barsamian) Quiz 3

Ohio University, Wednesday, 22 September, 2004

Name (print): _____

Q3: $\frac{\quad}{20}$ Attendance: $\frac{\quad}{12}$ Quizzes: $\frac{\quad}{60}$ Course: $\frac{\quad}{72}$ Course Percentage: % Course Grade:

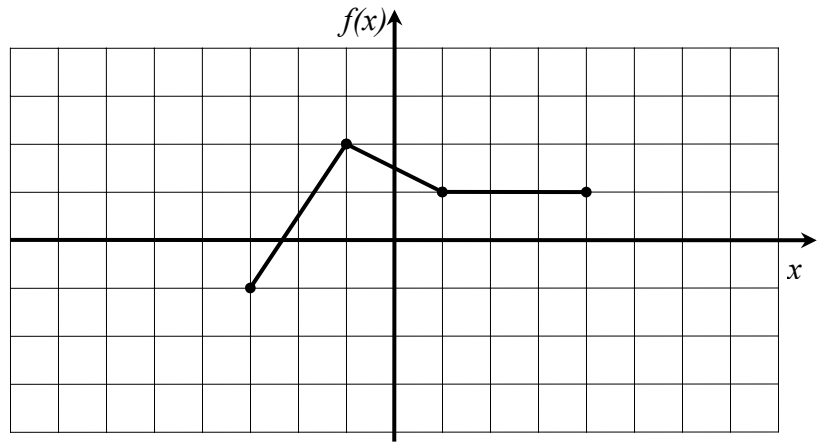
1 Use the technique of “completing the square” to rewrite the function $f(x) = x^2 + 6x + 11$ in the form $f(x) = (x + h)^2 + k$.

2 Using transformations, graph the function from problem (1). Your solution should include three graphs: an original graph, a transformed graph, and another transformed graph. (Be sure to label important points.)

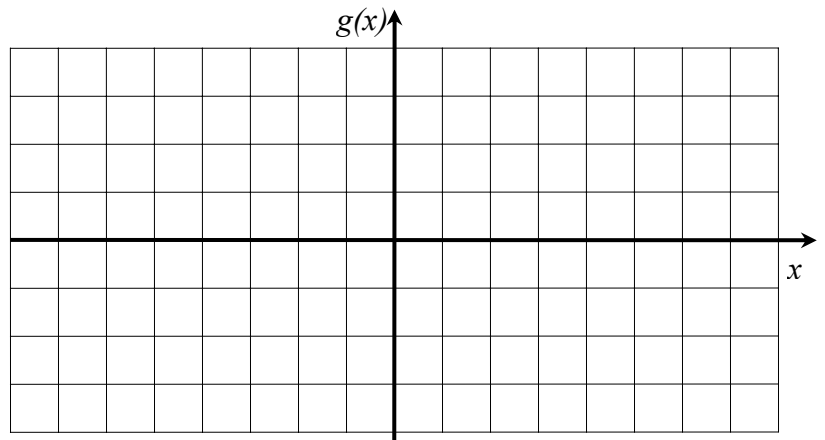


3] The graph of a function $f(x)$ is shown at right.

(a) On the graph of $f(x)$, label the four important points with their coordinates.



(b) Let $g(x) = f(x+2)$. Sketch the graph of $g(x)$ on the axes below. On your graph of $g(x)$, make sure that you also label the four new important points with their coordinates.



4] Let $f(x) = 2x+1$ and $g(x) = \frac{(2x-1)(x-3)}{(x-3)}$. Sketch the graphs of f and g on separate axes. (Be sure to label important points.)

