Math 120 D **Quiz 3** (25 minutes) Tuesday, October 21, 1997

Name ____________________________ **Student number** ______________ **Quiz section:** _______

Please **show your work** for full credit.

1. The graph of the formula $f(x)$ versus x is shown to the right.
(a) Find $f(1)$ and $f(3)$.
(b) Sketch the graph of $\frac{1}{2}f(-2x)$ versus x.

2. Let $g(x) = 3x^2 + 1$. Find $g(g(x))$ and $g(\frac{1}{x})$.

3. A windshield wiper has an arm of length 10 inches, with the blade running the length of the arm. If the tip of the arm travels a distance of 12 inches (i.e., it traces out a 12 inch long arc), what angle (in radian) does the wiper rotate through? And what is the area swept by the wiper?