MATH 108 – QUIZ 1 – 3 SEPTEMBER 1998

Answer all of the following questions in the space provided. Show all work as partial credit may be given. Answers without justification, even if they are correct, will earn no credit.

1. (3 pts.) Find the domain of the function $f(x) = \dfrac{1}{\sqrt{x-6}}$.

2. (2 pts. each) Suppose that at t hours past midnight, the temperature at Reagan National Airport in Washington, D.C. is given by $C(t) = -\dfrac{1}{6}t^2 + 2t + 20$ where the temperature is measured in degrees Celsius.

(a) What is the temperature at Reagan National at 6 A.M.?

(b) By how much did the temperature increase or decrease between 6 A.M. and 8 A.M.?

3. (3 pts.) Plot the graph of the function $f(x) = 2x + 3$. Be sure to plot at least 3 points on the graph and label them with their (x, y) coordinates.