## Quiz $1 \quad$ Calculus $1 \quad$ 9/4/2007

Each problem is worth 5 points. Clear and complete justification is required for full credit.

1. If a cricket chirps 113 times per minute at $70^{\circ} \mathrm{F}$ and 173 chirps per minute at $80^{\circ} \mathrm{F}$, find a linear equation that models the temperature as a function of the number of chirps per minute.
2. Find an exponential function of the form $f(x)=C a^{x}$ passing through the points $(1,6)$ and $(3,24)$.
