3. a. Window: $0 \leq X \leq 94, 0 \leq Y \leq 80$; no

b. $y = 1.758x + 105$; the line does not fit the points exactly but is close to most of them.

c. $(0, 105)$; $105^\circ$F is the predicted average January temperature at $0^\circ$ N (the equator).

d. $1.758$ is the rate of change for the temperature. The average January temperature drops about $1.76^\circ$ F for each increase of $1^\circ$ in latitude.

e. Other geographic factors, including proximity to large bodies of water and elevation, affect the temperature. For example, Olympia and San Francisco are both located on the Pacific coast and are much warmer than the corresponding inland cities Bismarck and Charleston.

Section 9.4

1. The United States