The following gives different populations as functions of time, where t is in **years**.

___ $P_1 = 8000(2)^{2t}$

___ $P_2 = 8000(2)^{6t}$

___ $P_3 = 8000(1.03)^{t/6}$

___ $P_4 = 8000(2)^{t/6}$

___ $P_5 = 8000(2)^{t/2}$

A. The population doubles in size every 2 years.
B. The population doubles every 6 months.
C. The population grows by 3% every 6 years.
D. The population doubles in size every 2 months.

Directions: Match the description of the population with the formula. Then construct your own description for the formula that is not used. Also determine which population is increasing the fastest.