

Seeing Red VI

Based on your class's earlier estimate of the proportion of red books in the school library, how many red tags and how many white tags would you recommend that the library staff purchase? On separate paper, write a letter to the librarian in which you give your recommendation and a clear rationale for the quantities you have suggested ordering. Be sure to explain how the margin of error of your class's estimate affected your recommendation. Keep in mind that it is far less expensive to order security tags in larger quantities. The price per 5000 tags is \$1900.00, the price per 1000 tags is \$450.00, and the price per 100 tags is \$72.00.

As a follow-up, determine how many books your class would have needed to sample in order to reduce the margin of error of your estimate to 0.01 . Show your calculation in the space below.