

Homework Solutions

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Exercise 15

- (a) $\alpha = 2/30$. There are only 2 vouchers out of 30 in Bag E with face values of \$1 or less or \$10 or more. $\beta = 20/20$ because there are 20 vouchers out of 30 in Bag F with face values that are not \$1 or less or \$10 or more.
- (b) The simplest choice for Decision Rule 2 is to reject H_0 if the value of the voucher is \$2 or less or \$9 or more. Then $\alpha = 6/30$ and $\beta = 12/30$. We see that under Decision Rule 2, α larger and β is smaller than they were under Decision Rule 1.