

Homework Solutions
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Exercise 32

- (a) The direction of extreme is to the left.
- (b) (i) You should circle the 3 X's over the 2 and the 4 in the Box I diagram. There are 35 vouchers altogether in Box I, so $\alpha = 3/35$.
(ii) You should circle the 14 X's over the 6, 8, 10, and 12 in the Box II diagram. There are 35 vouchers altogether in Box II, so $\alpha = 14/35$.
- (c) You should indicate the 7 X's over the 2, 4, and 6 in the Box I diagram, so p -value = $7/35$.
- (d) No, it is not statistically significant. The value 6 is in the acceptance region.
- (e) We need to move the critical value to the right in order to expand the rejection region. The simplest choice would be to change it from \$4 to \$6. The decision rule would be "Reject H_0 if the observed voucher value is \$6 or less."