

Problem\_Text

A manufacturer of a 40-amp fuses wants to make sure the mean amperage is in fact 40. If the mean amperage is high

A manufacturer of a 40-amp fuses wants to make sure the mean amperage is in fact 40. If the mean amperage is less

Minor surgery on horses under field conditions requires a reliable short-term anesthetic producing good

The recommended daily dietary allowance for zinc among males older than age 50 years is 15 mg/day. A study reports

A commonly prescribed drug for relieving anxiety is believed to 60% effective. Experimental results wi

A random sample of 10 chocolate energy bars from a certain company has, on average, 232 calories with a standard c

A manufacturer of 40-amp fuses wants to make sure that the mean amperage at which its fuses burn out is in fact 40. If the mean amperage is lower than 40, customers will complain because the fuses

A manufacturer of a 40-amp fuses wants to make sure the mean amperage is in fact 40. If the mean amperage is less

A manufacturer of a 40-amp fuses wants to make sure the mean amperage is in fact 40. If the mean amperage is less

The director of manufacturing for ACME industries is interested in a computer-assisted training progra

A national supermarket chain wants to redesign self checkout lanes throughout the country. Two designs have been s  
You are measuring the average calorie intake across teenage boys and teenage girls. You get two  
samples, one of boys and one of girls. The sample of boys has 12 participants, and leads to a sample  
mean of 2637 calories with a sample standard deviation of 1138. The sample of girls has 11

A teacher believes that the standard deviation of scores for a particular Midterm that he gives every semester is 4 poin

Twelve fish are randomly sampled from a salmon hatchery and their lengths are measured. The average

The price per box of "Frosted Toasty Bites" cereal throughout the US is believed to be a normal random variable with m

The price per box of "Frosted Toasty Bites" cereal throughout the US is sampled of 15 US grocery stores showed a sam

Sample A has a sample of size 3 has a sample variance of 7.8. Sample size B has a different sample of size 5 has a sa

a random sample of size 200 from population A finds 167 individuals with a certain gene. An independent random san

a random sample of size 200 from population A finds 167 individuals with a certain gene. An independent random san

A random sample consisting of 66 van drivers for a nationwide moving company ("Company 1") drove an average of 28

| Test_Type                | Alternative | n | n1  | n2  | x   | x1 |
|--------------------------|-------------|---|-----|-----|-----|----|
| one_sample_t_test_mear   | greater     |   | 25  | 0   | 0   | 0  |
| one_sample_z_test_mear   | less        |   | 50  | 0   | 0   | 0  |
| one_sample_z_test_mear   | less        |   | 73  | 0   | 0   | 0  |
| one_sample_z_test_mear   | less        |   | 12  | 0   | 0   | 0  |
| one_proportion_z_test    | greater     |   | 100 | 0   | 0   | 68 |
| one_sample_t_test_mear   | two-sided   |   | 10  | 0   | 0   | 0  |
| one_sample_t_test_mear   | two-sided   |   | 10  | 0   | 0   | 0  |
| one_sample_t_test_mear   | less        |   | 29  | 0   | 0   | 0  |
| one_sample_z_test_mear   | less        |   | 30  | 0   | 0   | 0  |
| one_sample_t_test_mear   | greater     |   | 15  | 0   | 0   | 0  |
| two_sample_t_test_unpo   | greater     |   | 0   | 120 | 100 | 0  |
| two_sample_t_test_unpo   | greater     |   | 0   | 12  | 11  | 0  |
| chi_square_variance_test | greater     |   | 10  | 0   | 0   | 0  |
| one_sample_t_test_mear   | two-sided   |   | 12  | 0   | 0   | 0  |
| one_sample_t_test_mear   | less        |   | 15  | 0   | 0   | 0  |
| chi_square_variance_test | greater     |   | 15  | 0   | 0   | 0  |

|                       |         |   |     |     |   |     |
|-----------------------|---------|---|-----|-----|---|-----|
| f_test_variance       | less    | 0 | 3   | 5   | 0 | 0   |
| two_proportion_z_test | less    | 0 | 200 | 200 | 0 | 167 |
| two_proportion_z_test | less    | 0 | 200 | 200 | 0 | 167 |
| two_sample_z_test     | greater | 0 | 66  | 62  | 0 | 0   |



|     |   |   |   |       |       |   |      |     |
|-----|---|---|---|-------|-------|---|------|-----|
| 0   | 0 | 0 | 0 | 0     | 0     | 0 | 0    | 0   |
| 178 | 0 | 0 | 0 | 0     | 0     | 0 | 0    | 0   |
| 178 | 0 | 0 | 0 | 0     | 0     | 0 | 0    | 0   |
| 0   | 0 | 0 | 0 | 28000 | 22000 | 0 | 2100 | 820 |

| sigma | sigma_known | s_squared | s1_squared | s2_squared | sigma0_squared |
|-------|-------------|-----------|------------|------------|----------------|
| 0     | 0           | 0         | 4          | 0          | 0              |
| 0     | 0           | 0         | 4          | 0          | 0              |
| 8.6   | 1           | 0         | 0          | 0          | 0              |
| 0     | 1           | 6.43      | 0          | 0          | 0              |
| 0     | 0           | 0         | 0          | 0          | 0              |
| 0     | 0           | 0         | 0          | 0          | 0              |
| 0     | 0           | 0         | 0          | 0          | 0              |
| 0     | 0           | 4         | 0          | 0          | 0              |
| 0     | 0           | 4         | 0          | 0          | 0              |
| 0     | 0           | 0         | 0          | 0          | 0              |
| 0     | 0           | 0         | 0          | 0          | 0              |
| 0     | 0           | 0         | 0          | 0          | 0              |
| 0     | 0           | 0         | 0          | 0          | 0              |
| 0     | 0           | 0         | 0          | 0          | 16             |
| 2.2   | 1           | 0         | 0          | 0          | 0              |
| 0     | 0           | 0         | 0          | 0          | 0              |
| 0     | 0           | 0         | 0          | 0          | 2              |

|   |   |   |     |     |   |
|---|---|---|-----|-----|---|
| 0 | 0 | 0 | 7.8 | 6.3 | 0 |
| 0 | 0 | 0 | 0   | 0   | 0 |
| 0 | 0 | 0 | 0   | 0   | 0 |
| 0 | 0 | 0 | 0   | 0   | 0 |



| alpha | observed | expected_probs | observed_table |
|-------|----------|----------------|----------------|
|-------|----------|----------------|----------------|

|      |   |   |   |
|------|---|---|---|
| 0.05 | 0 | 0 | 0 |
|------|---|---|---|

|     |   |   |   |
|-----|---|---|---|
| 0.1 | 0 | 0 | 0 |
|-----|---|---|---|

|     |   |   |   |
|-----|---|---|---|
| 0.1 | 0 | 0 | 0 |
|-----|---|---|---|

|      |   |   |   |
|------|---|---|---|
| 0.05 | 0 | 0 | 0 |
|------|---|---|---|

|      |   |   |   |
|------|---|---|---|
| 0.03 | 0 | 0 | 0 |
|------|---|---|---|

|      |   |   |   |
|------|---|---|---|
| 0.05 | 0 | 0 | 0 |
|------|---|---|---|

|      |   |   |   |
|------|---|---|---|
| 0.05 | 0 | 0 | 0 |
|------|---|---|---|

|     |   |   |   |
|-----|---|---|---|
| 0.1 | 0 | 0 | 0 |
|-----|---|---|---|

|     |   |   |   |
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| 0.1 | 0 | 0 | 0 |
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|      |   |   |   |
|------|---|---|---|
| 0.05 | 0 | 0 | 0 |
|------|---|---|---|

|      |   |   |   |
|------|---|---|---|
| 0.05 | 0 | 0 | 0 |
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|      |   |   |   |
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| 0.05 | 0 | 0 | 0 |
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|   |   |   |   |
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| 0 | 0 | 0 | 0 |
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|      |   |   |   |
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| 0.05 | 0 | 0 | 0 |
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|     |   |   |   |
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| 0.1 | 0 | 0 | 0 |
|-----|---|---|---|

|      |   |   |   |
|------|---|---|---|
| 0.05 | 0 | 0 | 0 |
|------|---|---|---|

|      |   |   |   |
|------|---|---|---|
| 0.05 | 0 | 0 | 0 |
|------|---|---|---|

|   |   |   |   |
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| 0 | 0 | 0 | 0 |
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|   |   |   |   |
|---|---|---|---|
| 0 | 0 | 0 | 0 |
|---|---|---|---|

|      |   |   |   |
|------|---|---|---|
| 0.05 | 0 | 0 | 0 |
|------|---|---|---|