



Puzzle Time

What Do You Call A Bird That's Been Eaten By A Cat?

Write the letter of each answer in the box containing the exercise number.

1. The table shows the daily number of lunch-hour customers to a local fish market for 16 days. Estimate the population mean μ .

| Number of Customers | | | |
|---------------------|----|----|----|
| 15 | 16 | 27 | 8 |
| 12 | 21 | 26 | 24 |
| 18 | 32 | 38 | 34 |
| 24 | 14 | 42 | 25 |

2. The table shows the total number of free throws made by a high school basketball team for eight consecutive games. Estimate the population mean μ .

| Total Number of Free Throws Made | | | |
|----------------------------------|----|----|----|
| 24 | 19 | 7 | 14 |
| 13 | 11 | 12 | 4 |

Answers

L. ± 0.06

W. ± 0.1

O. ± 0.04

W. ± 0.08

A. ± 0.02

A. 23.5

L. ± 0.18

S. 13

Find the margin of error for a survey that has the given sample size. Round your answer to the nearest tenth of a percent.

3. 100 4. 2400 5. 32
 6. 289 7. 750 8. 170

| | | | | | | | | |
|---|--|---|---|---|---|---|---|---|
| 1 | | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|--|---|---|---|---|---|---|---|

9.6**Extra Practice**

1. A randomized comparative experiment tests whether photo therapy affects the size of the area of skin irritations. The control group has eight patients and the treatment group, which receives the photo therapy, has eight patients. The table shows the results.

| | Area of Skin Irritation (square centimeters) | | | | | | | |
|-----------------|--|-----|-----|-----|-----|-----|-----|-----|
| Control Group | 4.2 | 1.3 | 5.1 | 3.4 | 2.7 | 4.1 | 3.6 | 2.4 |
| Treatment Group | 1.2 | 2.5 | 4.1 | 3.7 | 2.1 | 1.5 | 2.4 | 1.9 |

- Find the mean area of the control group.
- Find the mean area of the treatment group.
- Find the experimental difference of the means.
- Display the data in a double dot plot.
- What can you conclude?
- Resample the data using a simulation.
- Find the mean score of the new control group.
- Find the mean score of the new treatment group.
- Find the experimental difference of the new means.