

# What Do You Call A Bird That Has Been Eaten By A Cat?

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

1. The table shows the numbers of lunch-hour customers to a local fish market for a random sample of 16 days. Estimate the population mean  $\mu$ .

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 numbers of free throws made by a high school basketball team for a random sample of eight games. Estimate the population mean  $\mu$ .

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

## Answers

- L.  $\pm 0.06$
- W.  $\pm 0.1$
- O.  $\pm 0.04$
- W.  $\pm 0.08$
- A.  $\pm 0.02$
- A. 23.5
- L.  $\pm 0.18$
- S. 13.25

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
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9. \* For a sample size of 2412, and a percentage of 36% "Yes" answers to a question, What is the interval of likely "Yes" answers for the entire population?

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. *± standard deviation*
- Find the mean area of the treatment group. *± standard deviation*
- Find the experimental difference of the means.
- Display the data in a double dot plot.
- What can you conclude?

In Exercises 83–86, a normal distribution has mean of 26 and standard deviation of 3. Find the indicated probability for a randomly selected  $x$ -value from the distribution.

2 between 23 and 26

3 at least 17

4 at most 32

5 between 20 and 35

In Exercises 87 and 88, identify the population and the sample. Describe the sample.

- In a school district, a survey of 1230 high school students found that 1144 of them felt that the school should keep the music program.
- In a small town, a survey of 1000 citizens found that 872 of them want to replace the street signs.

In Exercises 89 and 90, identify the type of sample and explain why the sample is biased.

- A school newspaper is doing a story about study habits and wants to know how many hours, on average, students spend doing homework each night. The student reporter asks students in an AP Calculus class.
- Every fifth person that walks into a gym answers a survey about the importance of person fitness.