Task card 1 Confidence Intervals for a Mean &...

What critical value z* is used for a 99% confidence interval?

Task card 2 Confidence Intervals for a Mean &...

A random sample of 49 gives a sample mean of 68 centimeters for the height of sunflowers. The population standard deviation is σ = 14 centimeters. Find the margin of error for a 95% confidence interval for the mean.

Task card 3 Confidence Intervals for a Mean &...

A 95% confidence interval for the mean of the weight of bags of rice is (76.4, 86.8) ounces. Find the margin of error.

Task card 4 Confidence Intervals for a Mean &...

A 95% confidence interval for the mean of the height of sunflowers is (56.9, 68.7) centimeters. Find the sample mean.

Task card 5 Confidence Intervals for a Mean &...

A 95% confidence interval for the mean of the battery life of a phone model is (32.3, 36.5) hours. Find the margin of error.

Task card 6 Confidence Intervals for a Mean &...

A 95% confidence interval for the mean of the score on a reading test is (26.1, 35.1) points. Find the margin of error.

Task card 7 Confidence Intervals for a Mean &...

A random sample of 225 gives a sample mean of 73 centimeters for the height of sunflowers. The population standard deviation is $\sigma = 30$ centimeters. Find the margin of error for a 95% confidence interval for the mean.

Task card 8 Confidence Intervals for a Mean &...

A random sample of 36 gives a sample mean of 62 hours for the battery life of a phone model. The population standard deviation is $\sigma = 3$ hours. Find the 95% confidence interval for the population mean.

Task card 9 Confidence Intervals for a Mean &...

A 95% confidence interval for the mean of the weight of bags of rice is (87.4, 91.0) ounces. Find the sample mean.

Task card 10 Confidence Intervals for a Mean &...

A confidence interval for a mean is computed. If the sample size is decreased from 400 to 100 (everything else the same), does the interval get wider or narrower?

Task card 11 Confidence Intervals for a Mean &...

In a random sample of 900 teens, 810 own a tablet. Find the margin of error for a 95% confidence interval for the proportion of all teens who own a tablet.

Task card 12 Confidence Intervals for a Mean &...

A random sample of 144 gives a sample mean of 17 minutes for the commute time of workers. The population standard deviation is $\sigma = 24$ minutes. Find the 95% confidence interval for the population mean.

Task card 13 Confidence Intervals for a Mean &...

A random sample of 225 gives a sample mean of 83 ounces for the weight of bags of rice. The population standard deviation is $\sigma = 30$ ounces. Find the margin of error for a 95% confidence interval for the mean.

Task card 14 Confidence Intervals for a Mean &...

A random sample of 100 gives a sample mean of 45 ounces for the weight of bags of rice. The population standard deviation is $\sigma = 5$ ounces. Find the margin of error for a 95% confidence interval for the mean.

Task card 15 Confidence Intervals for a Mean &...

A random sample of 81 gives a sample mean of 33 hours for the battery life of a phone model. The population standard deviation is $\sigma = 4.5$ hours. Find the 95% confidence interval for the population mean.

Task card 16 Confidence Intervals for a Mean &...

A 95% confidence interval for the mean of the score on a reading test is (48.7, 54.7) points. Find the sample mean.

Task card 17 Confidence Intervals for a Mean &...

A confidence interval for a mean is computed. If the confidence level is lowered from 99% to 95% (everything else the same), does the interval get wider or narrower?

Task card 18 Confidence Intervals for a Mean &...

In a random sample of 100 students, 90 walk to school. Find the margin of error for a 95% confidence interval for the proportion of all students who walk to school.

Task card 19 Confidence Intervals for a Mean &...

A random sample of 16 gives a sample mean of 84 minutes for the commute time of workers. The population standard deviation is σ = 12 minutes. Find the margin of error for a 99% confidence interval for the mean.

Task card 20 Confidence Intervals for a Mean &...

A random sample of 100 gives a sample mean of 57 inches for the length of a fish species. The population standard deviation is σ = 5 inches. Find the 99% confidence interval for the population mean.

Task card 21 Confidence Intervals for a Mean &...

A random sample of 144 gives a sample mean of 62 inches for the length of a fish species. The population standard deviation is σ = 30 inches. Find the margin of error for a 95% confidence interval for the mean.

Task card 22 Confidence Intervals for a Mean &...

A 95% confidence interval for the mean of the battery life of a phone model is (46.5, 57.1) hours. Find the margin of error.

Task card 23 Confidence Intervals for a Mean &...

A 95% confidence interval for the mean of the battery life of a phone model is (82.3, 92.9) hours. Find the sample mean.

Task card 24 Confidence Intervals for a Mean &...

A 95% confidence interval for the mean of the weight of bags of rice is (79.5, 81.7) ounces. Find the margin of error.

Confidence Intervals for a Mean & Proportion Task Cards

Recording sheet · Grade 12 · Use z* = 1.645 (90%), 1.96 (95%) or 2.576 (99%). Round margins of error for a mean to 2 decimal places and for a proportion to 3 decimal places, then add and subtract. Write intervals as (lower, upper). For lettered choices, write the letter.

Scan to check your answers

Name: _____ Date: _____

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24

Confidence Intervals for a Mean & Proportion Task Cards: Answer Key

Grade 12 · Easy

The answers online

1. 2.576	**2.** 3.92	**3.** 5.2
4. 62.8	**5.** 2.1	**6.** 4.5
7. 3.92	**8.** (61.02, 62.98)	**9.** 89.2
10. wider	**11.** 0.02	**12.** (13.08, 20.92)
13. 3.92	**14.** 0.98	**15.** (32.02, 33.98)
16. 51.7	**17.** narrower	**18.** 0.059
19. 7.73	**20.** (55.71, 58.29)	**21.** 4.9
22. 5.3	**23.** 87.6	**24.** 1.1