

Worksheet 1: Overconfidence quiz

90%

1. Martin Luther King's age at death: (\quad , \quad)
2. Length of the Nile River: (\quad , \quad)
3. Number of countries that are members of OPEC: (\quad , \quad)
4. Number of books in the Old Testament: (\quad , \quad)
5. Diameter of the moon: (\quad , \quad)
6. Weight of an empty Boeing 747: (\quad , \quad)
7. Year in which Wolfgang Amadeus Mozart was born: (\quad , \quad)
8. Gestation period (in days) of an Asian elephant: (\quad , \quad)
9. Air distance from London to Tokyo: (\quad , \quad)
10. Deepest recorded point in the oceans: (\quad , \quad)

Now read the answers at the bottom of the page, and count how many of them fall within your 90% confidence intervals.

Extra question:

90%

11. Proportion of people taking the above quiz in this room who get at least 8 out of 10 items correct: (\quad , \quad)

Answers: 1. 39 2. 6737 km or 4187 mi 3. 13 4. 39 5. 3475 km or 2160 mi 6. 176,904 kg or 390,000 lbs 7. 1756 8. 645 9. 9588 km or 5959 mi 10. 11033 m or 36,198 ft

Worksheet 2: Calibration practice

If you got about half the questions on the overconfidence quiz right, then you now know that when you feel 90% sure, you are actually 50% sure. Try the next two questions, and keep in mind that an interval that *feels* like a 90% confidence interval is probably not wide enough:

90%

12. What proportion of the world's population lived in Asia as of 2011? $\left(\quad , \quad \right)$
13. In what year was Mohandas Gandhi assassinated? $\left(\quad , \quad \right)$

More calibration practice:

50%

90%

14. A Gutenberg Bible, published in the 1450s, was sold at auction in 1978. How much did it sell for? $\left(\quad , \quad \right)$ $\left(\quad , \quad \right)$
15. What proportion of U.S. physicians are women, as of 2006? $\left(\quad , \quad \right)$ $\left(\quad , \quad \right)$
16. In what year was the Wimbledon tennis tournament first held? $\left(\quad , \quad \right)$ $\left(\quad , \quad \right)$
17. How many Grammy Awards has Bob Dylan won? $\left(\quad , \quad \right)$ $\left(\quad , \quad \right)$
18. How far is Neptune from the Sun? $\left(\quad , \quad \right)$ $\left(\quad , \quad \right)$

Homework: Make at least seven predictions in your daily life in the form of 90% confidence intervals (or, if you wish, 50% confidence intervals). Examples: At what time will I arrive at work? How much will I pay at the grocery store? What is the balance in my bank account right now? Record whether your predictions are accurate.

Worksheet 2: Calibration practice

For the next two questions, try the following strategy: Think of the lowest possible value and the highest possible value the answer could be. Then take these numbers to be the endpoints of your 90% confidence interval:

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