Taking an IQ test doesn't have to be akin to drilling through the marathon of questions that is the SAT. (Please don't make us go through that again. Please.) In fact, what has been hailed as the world's shortest IQ test in the world is a whole three questions. Yup, you can take it right now and start bragging to your friends within 30 minutes.

## Trick Question

The Cognitive Reflection Test (CRT) was developed by psychologist Shane Frederick in 2005. In a paper published in The Journal of Economic Perspectives, Frederick describes that he picked the three questions for the CTR because they were all "found to yield impulsive erroneous responses." That is, the questions make it easy for people to quickly jump to conclusions, instead of closely analyzing the seemingly simple quiz items.

This kind of mental trickery is how so few people can nail each of the three questions. Beginning in January 2003, the CRT was administered to 3,428 respondents in 35 separate studies over a 26 -month period. During that experiment, only 17 percent of students from the top universities in the world (like Yale and Harvard) got a perfect score on the CRT questions. Based on the results of this 26 -month experiment, Frederick introduced the complete CRT to the world in 2005. This short test was designed to test someone's ability to ignore their intuitive gut response and think more rationally. Scroll down to try out the questions, and keep scrolling to check your answers.

Here Are the Questions

1. The Bat and Ball Problem

A bat and a ball together cost $\$ 1.10$. The bat costs $\$ 1$ more than the ball. How much does the ball cost?

## 2. The Widget-Making Machine Problem

If it takes 5 machines 5 minutes to make 5 widgets, how long would it take 100 machines to make 100 widgets?
3. The Size-Double Lily Pad Patch Problem

There is a patch of lily pads in a lake. Every day, the patch doubles in size. If it takes 48 days for the patch to cover the entire lake, how long would it take for the patch to cover half the lake?

Scroll down to read the answers to the questions in the CRT.

## Here Are the Answers

1. The ball costs 5 cents. You probably guessed 10 cents, didn't you? No judgment. A ball that costs 5 cents plus a bat that costs $\$ 1.05$ will set you back $\$ 1.10$. And $\$ 1.05$ is exactly $\$ 1$ more expensive than 5 cents. A Princeton study found that people who answered 10 cents were significantly less patient than those who got it correct.
2. It would take 100 machines 5 minutes to make 100 widgets. Your gut might tell you the answer is 100 minutes. From the question, we know that it takes 5 minutes for 1 machine to make 1 widget. Thus, it would take 5 minutes for 100 machines to make 100 widgets. (Check out a similar, if not more difficult problem, here.)
3. The lily pads would cover half the lake in 47 days. You might have guessed 24 days. It seems intuitive to halve the number of days because you're halving the size of the lilypad patch. But if the area of the lake covered in lilypads doubles every day, it would only take one day for it to go from being half covered to fully covered. Take one day away from 48 days and you're left with 47. (We have a similar problem here, too.)
