# Cognitive Reflection Task (CRT)

(Frederick, 2005; Shenhav et al. 2012)

#### Instructions for Translators

- For question 1, where there are equivalent names to "Mark" and "Adam" in your language, please replace with their counterparts. Where there is no equivalent, please replace with two short men's names that are popular and unremarkable in your country (to keep them as similar as possible).
- For questions 1-3, each question has an intuitive (but incorrect) response that a participant must "override" in order to identify the correct response (when these questions are presented in English the most common response for each question is the intuitive response). When translated, a naive participant should feel the "pull" of the intuitive response as in the original English and have to "override" the intuitive response to identify the correct response (the correct and intuitive answers are provided at the end of this document). It is therefore important to:
  - o Keep the numbers in the CRT questions the same
  - o Make sure that the intuitive response still has a "pull" (perhaps by asking naive colleagues)
- For questions 1-3, for each occurrence of the phrase "Please enter a number", please use the word for "numeral" instead of "number" if it sounds natural in your language and "numeral" is a well-known word (we don't think "numeral" sounds particularly natural in English so we used the word "number" instead).
- For question 6, pay particular attention to translating "God (or gods)" in such a way that people should answer "yes" if they believe in a god or gods associated with non-Christian religions (again, perhaps check with colleagues).
- For question 6, if the question is inappropriate in your context (for example, where non-belief could result in criminal prosecution), please remove it.

#### **CRT Questions:**

In the following section, you will be asked several questions. Please do your best to answer them as accurately as possible.

1. The ages of Mark and Adam add up to 28 years total. Mark is 20 years older than Adam. How many years old is Adam?

[Please enter a number]

2. If it takes 10 seconds for 10 printers to print out 10 pages of paper, how many seconds will it take 50 printers to print out 50 pages of paper?

[Please enter a number]

3. On a loaf of bread, there is a patch of mould. Every day, the patch doubles in size. If it takes 40 days for the patch to cover the entire loaf of bread, how many days would it take for the patch to cover half of the loaf of bread?

[Please enter a number]

### Additional CRT-related questions:

- 4. You have just answered three reasoning problems. How many of them do you think you answered correctly?
- 5. You have just answered three reasoning problems. Did you look any of the answers up online??

[Yes/No]

6. How strongly do you believe in God (or gods) (from 0-100)? If you are certain that God (or gods) does not exist, then enter "0" and if you are certain that God (or gods) does exist then enter "100".

## **CRT Answers:**

- 1. Correct = 4; Intuitive = 8
- 2. Correct = 10;Intuitive = 50
- 3. Correct = 39; Intuitive = 20