
Problem of the Week

Number Four

February 4, 2013

Here's a little teaser for you: What unusual word of seven letters has three u's in it? While we're at it, can you think of a word with more than four letters that starts and ends with the letters "he"? Or how about a word with the sequence "adac" in it? Food for thought, but none of those is the problem of the week. For that, let's try an amusing variation on last week's problem:

Which of the following statements is/are true?

- 1. At least one of these statements is false.**
- 2. At least two of these statements are false.**
- 3. At least three of these statements are false.**
- 4. At least four of these statements are false.**
- 5. At least five of these statements are false.**
- 6. At least six of these statements are false.**
- 7. At least seven of these statements are false.**
- 8. At least eight of these statements are false.**

As for the answers to the opening questions, the unusual seven-letter word with three u's is "unusual." The word that starts and ends with "he" is "headache." And the word with "adac" in it? Also "headache." Heh.

FOLLOW THESE INSTRUCTIONS TO THE LETTER: Place your full name and e-mail address in the top, right-hand corner of the page. If you are receiving course credit for this, please also indicate the professor and the course number. Write your answer on the back of the page. If there is any element of reasoning or calculation involved, then please also include a clear, brief explanation for your answer. In such cases, an answer without an explanation will be discarded. Be sure to write neatly!

Solutions are due to Jason Rosenhouse by 5:00 on Friday, February 8. One weekly winner will receive a five-dollar gift card from Starbucks. Winners will be drawn randomly from among the correct answers.