

# MATHCOUNTS<sup>®</sup> Problem of the Week Archive

## *Triskaidekaphobia – November 9, 2015*

### *Problems*

Triskaidekaphobia is an irrational fear of the number 13. Because of fear and superstition surrounding the number 13, it is common in tall buildings for the 13th floor to be skipped when installing elevators buttons, it is instead numbered 14. A particularly fearful hotel owner decided to skip floor 13, as well as, any multiples of 13 when numbering the floors. He did the same thing when numbering the rooms. If each floor has rooms numbered to 100 and the elevator has buttons numbered to 30, how many rooms does the hotel have?

Friday the 13th is a day that is believed widely to be unlucky, a superstition thought to be among the most common in the United States. This week, the 13<sup>th</sup> will fall on a Friday. In what month will the next Friday the 13th occur?

What is the maximum number of Friday the 13ths that can occur in one calendar year?

\* Solutions are posted to the [Problem of the Week Archive](#) the following week. \*