

# Straight's Problem of the Week

GRE<sup>®</sup> 534 – August 25, 2008

*Full problem solution must be submitted  
on Monday, September 8, 2008.*

When I was teaching high school, I had a student who wrote the following as the final step in a problem solution:

$$\frac{1\cancel{8}}{\cancel{8}4} = \frac{1}{4}$$

Naturally, the final answer was correct, but I was concerned (and intrigued) by the fact that erroneous canceling had caused this phenomenon.

Find at least two other two-digit examples of this “lucky canceling” and at least two *three-digit* examples of this type of occurrence. (In each case, a single digit will be canceled from top to bottom.)