Problem of the Week
Number Ten

Find a triple (x, y, z) of positive whole numbers such that

$$28x + 30y + 31z = 365.$$

SOLUTION: One solution is $(1, 4, 7)$.

A non-leap-year has 365 days. In such a year, there is one month with 28 days, four months with 30 days, and seven months with 31 days. The answer now follows immediately.

Another possible solution is $(2, 1, 9)$, if you are curious.