



## Problem of the Week

### Problem C

#### This Product is a Mystery

The number  $A8$  is a two-digit number with tens digit  $A$  and units (ones) digit 8. Similarly,  $3B$  is a two-digit number with tens digit 3 and units digit  $B$ . When  $A8$  is multiplied by  $3B$ , the result is the four-digit number  $C730$ . That is,

$$\begin{array}{r} A8 \\ \times 3B \\ \hline C730 \end{array}$$



If  $A$ ,  $B$ , and  $C$  are each different digits from 0 to 9, determine the values of  $A$ ,  $B$ , and  $C$ .