## N.3 Zero Divisor

## AJ Rasure Programming for Problem Solving

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My simple test to check to see if a number, a, is a zero divisor for some  $\mathbb{Z}_m$  is to check any element of  $\mathbb{Z}_m$  against all of the other elements of  $\mathbb{Z}_m$ , b, such that if  $(ab)(mod\ m) \equiv 0$  then a, is notated. I continue this for all elements of  $\mathbb{Z}_m$  and keep only the unique a's.