

On the Subject of Modulus Manipulation

So many numbers to choose, yet only one is correct.

Use the first 3 characters in the serial number to form a 3-digit number; convert any letters to their numerical value modulus 10 (i.e. A = 1, B = 2, ... Z = 6). Make the following changes to the number in order based on **all** rule sets applicable, then submit the final number modulus 1000. If the final number is negative, submit 000.

- Modulus (denoted as %) is the remainder after dividing one number into another.
- Other Unsolved Modules is the number of other modules not yet completed **excluding** needy modules.

Rule Sets

Other Unsolved Modules % 5 = 0

1. If the bomb has more than one battery, add 400.
2. If the serial number contains the number 3 or 6, subtract 40.

Other Unsolved Modules % 4 = 0

1. If the bomb has at least one AA battery and at least one D battery, multiply by 2.
2. If the serial number has 4 letters, subtract 290.

Other Unsolved Modules % 3 = 0

1. If the bomb has more than three batteries, subtract 160.
2. If the bomb has more lit indicators than unlit indicators, add 75.

Other Unsolved Modules % 2 = 0

1. If the serial number has a vowel, add 340.
2. If the bomb has a PS/2, RJ-45, or Serial port, add 180.

Other Unsolved Modules % 1 = 0

1. If the bomb has at least one strike, subtract 45.
2. If the bomb has any unlit indicators, subtract 15.
3. If the last digit of the serial number is even, add 150.
4. If the number of minutes remaining on the countdown timer is even (or 0), add 6.