



Problem of the Week

Problem A

Entry Code

Janet has a safe that can be opened with a 4-digit code. Janet has set up her safe to open for any 4-digit code that satisfies the following rules:

1. The first digit and the last digit cannot be equal to each other.
2. The second digit must be greater than the third digit.
3. The last digit must be greater than either the third digit or greater than the first digit.
4. At least one digit must be an even number.

Which of the following codes would unlock the safe? Justify your answers.

- (a) 1234
- (b) 4321
- (c) 5313
- (d) 2644
- (e) 3333
- (f) 5312
- (g) 7437
- (h) 5857

