

Practice problems for lectures 15–17

Most of these exercises will be discussed in the lectures and the last discussion, and solutions will be posted at the end of week 10. The material is covered in lectures 15–17, and in chapter 6 (Condition and stability) and chapter 7 (Floating-point numbers) of the *EE133A Lecture Notes*.

1. Exercise A15.1 (c).
2. Exercise A15.11.
3. Exercise A15.23.
4. Exercise A16.1. Julia users can use the following definition of the function `chop`:

```
chop(x,n) = (x == 0.0) ? 0.0 :  
    sign(x) * round( abs(x) / 10^(floor(log10(abs(x)) - n + 1)) ) *  
    10^(floor(log10(abs(x))) - n + 1)
```

5. Exercise A16.2.
6. Exercise A16.3.
7. Exercise A17.1 (a, b, c).
8. Exercise A17.4.
9. Exercise A17.5.
10. Exercise A17.10.