MEEG301, Fall 2018, Homework 2

Solutions due at start of class on Thursday, September 27th.

Some homework problems from required text: "Design of Machinery," R.L. Norton, 5th Edition

Chapter 4 - Problems:

- Represent the following vectors in Cartesian coordinates, all angles are in degrees:
    - $10\ e^{\,j\,50}$
    - $5\,(e^{\,j\,45} - 1\,)$
    - $(3\ e^{\,j\,30}) * (2\ e^{\,j\,180})$
- 4-4: draw a picture and identify position A and B graphically and then do parts a., b., c. and d.;
- 4-6: do row k. - show all graphical construction;
- 4-7: do row k. - show your work and steps by calculating K_1, K_2, K_3, K_4, K_5 and A, B, C, D, E, F, and compare your results with the previous problem;
- 4-9: do row f. - do only the open configuration, show all graphical construction;
- 4-10: do row f. - do only the open configuration, show your work and compare your results with the previous problem;
- 4-18b, solve graphically and graph just the transmission angle vs. input angles (ccw positive from horizontal axis) start at 0 then every 30 degrees to 360; along with your graph of input angle vs. transmission angle also hand in visuals showing your construction for just 0, 90, 180, and 270 degree input angles;
- 4-18h;
- 4-57