

Fig 1

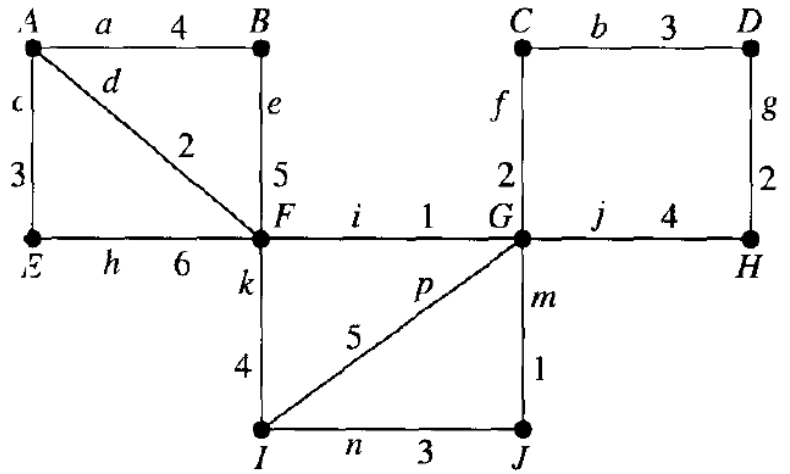


Fig 2

You may do this homework by hand (i.e., **NO need to draw it on a Computer**), and submit your result as a pdf file ([you may take pictures, copy/paste them to a MS Word/PowerPoint, and then convert it as a PDF file](#)). Please name the pdf file as **XXXX_HW1.pdf**, where **XXXX** is your **student ID**.

Then, upload this pdf file to moodle by **2020/06/17 10:00**. If you submit it late, your grade will be discounted.

!!Note!! this homework is VERY IMPORTANT, because it is very likely similar problems will appear in the final exam on 2020/06/17. Also, it is easy to receive grade from this homework (should be much easier than your grade from exams). So, please DO get it!

Q1: please use Prim's algorithm to construct an MST for Fig.1, (need to see your brief procedures)

Q2: please use Kruskal's algorithm to construct an MST for Fig 1. (need to see your brief procedures)

Q3: please use DFS to assign a strongly connected orientation for Fig 1. ()

Q4: same as Q1 but for Fig 2.

Q5: same as Q1 but for Fig 2.

Q6: same as Q1 but for Fig 2