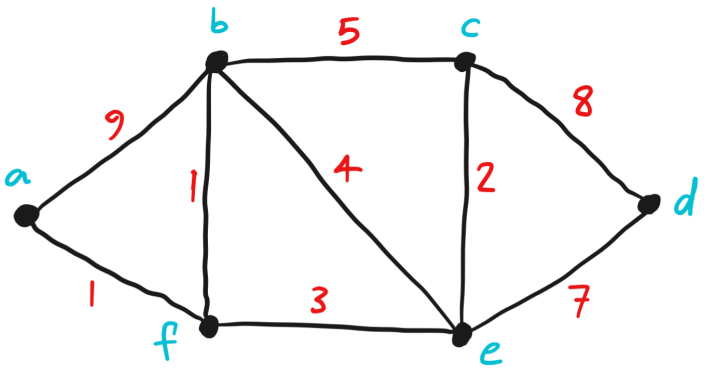
Last time we introduced the problem of finding a minimum-weight spanning tree (MST) in a graph with weighted edges.

Can you find an MST in the graph below? *(And think: what was your strategy? Could you generalize it to other examples?)*



Reminder: "weighted edges" means there is a function w that gives a real-number weight to each edge. In the graph above, the function w is given by the red numbers; for example, $w(\{a, b\}) = 9$.

Note: graphs with weighted edges often show up in applications! For example, the original application of MST's was to set up a power network as cheaply as possible – there, edges represent possible routes to lay electrical wire, and the weight of an edge is the cost of laying wire along that route.