Exercise Sheet 06

Task 1

4 p.

Show: Algorithm 6 terminates with $E = F$ and $V = V(F)$ exactly when G is connected.

Task 2

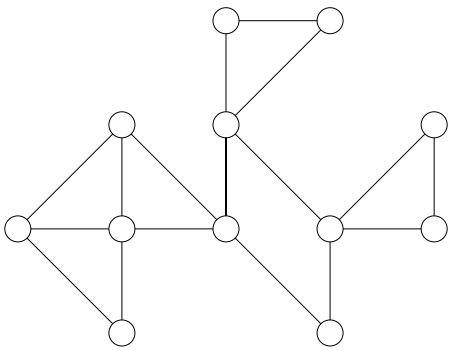
4 p.

Let T, T' be the edge sets of two spanning trees of a connected graph. Proof: for every $e \in T \setminus T'$ there exists an $e' \in T' \setminus T$ such that $T \setminus e \cup e'$ is again a spanning tree.

Task 3

2 p.

For the following graph G calculate $\kappa(G)$ and $\lambda(G)$.



Task	1	2	3	total
Points	4	4	2	10
reached				