Homework 8

(8.1) Let G be the simple graph with vertex set $\{1, 2, \ldots, 11\}$ defined by $i \leftrightarrow j$ if and only if i, j have a common factor bigger than 1. Determine the blocks of G.

(8.2) Construct a simple graph G with $\chi(G) = 2$, $\chi'(G) = 4$, $\delta(G) = 10$.

(8.3) Determine $\chi(G)$, $\chi'(G)$, and $\delta(G)$ for the graph G below.