Due November 8. (If you hand it in late you won't get it back on Monday.)

Chap 11 (p. 229) no: 11, 21, 26, 27, 34

Extra credit: no.16.

With all this empty space, I decided to write something which I hope is useful:

The extra credit problem is about isomorphisms and the complementary graph. Here is the answer to 11.13 which is related:

11.13. For simple graphs G and H prove that $G \cong H$ if and only if the complementary graphs are isomorphic: $\overline{G} \cong \overline{H}$.

The answers is: If $G \cong H$ there is a bijection $f : V(G) \to V(H)$ so that vertices a and b in G are connected by an edge in G if and only if (iff) $f(a), f(b)$ are connected by an edge in H. But this also gives an isomorphism of the complementary graphs since $\overline{G}$ has the same vertex set as G and $a, b \in V(\overline{G}) = V(G)$ are connected by an edge in $\overline{G}$ iff they are not connected by an edge in G iff the corresponding vertices $f(a), f(b)$ are not connected by an edge in H iff $f(a), f(b)$ *are* connected by an edge in $\overline{H}$.