Comp Theory – important Theorems:

Theorem 7.14 (pg. 288):

PATH is in P.

Theorem 7.15 (pg 289):

RELPRIME is in P.

Theorem 7.16 (pg.290):

Every CFL is a member of P.

Theorem 7.20 (pg. 294):

A language is in NP iff it is decided by some nondeterministic polynomial time Turing machine.

Theorem 7.27 (pg. 300):

SAT is in P iff P = NP.

Theorem 7.31 (pg. 301):

If A is polynomial time reducible to B and B is in P, then A is in P.

Theorem 7.32 (pg. 302):

3SAT is polynomial time reducible to CLIQUE.

Theorem 7.35 (pg. 304):

If B is NP-complete and B is in P, then P = NP.

Theorem 7.36 (pg. 304):

If B is NP-complete and B is polynomial time reducible to C, with C in NP, then C is NP-complete.

Theorem 7.37 (pg. 304) (implies 7.27):

SAT is NP-complete.

Corollary 7.42 (pg. 310):

3SAT is NP-complete.

(SAT is reducible to 3SAT in polynomial time)

Theorem 7.44 (pg. 312):

VERTEX-COVER is NP-complete

Theorem 7.46 (pg. 314):

HAMPATH is NP-complete.