# Tentative List of Homework Problems

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|---|---|---|
| 1.1 | 2, 4, 6, 10, 12, 14, 16, 20, 22, 28, 30 (no inverse), 34 | conditional, hypothesis, conclusion, converse, contrapositive |
| 1.2 | 2, 4, 6, 8 | |
| 1.3 | 6, 8, 12, 20, 22 | tautology, logically equivalent, satisfiable |
| 1.4 | 2, 6, 8, 10, 12, 14, 22, 26, 30, 32, 38 | counterexample |
| 1.5 | 2, 4, 6, 10, 12, 14, 16, 20, 22, 28, 30, 36, 38, 40 | |
| | | |
| 2.1 | 1, 5, 7, 9, 10, 12, 20, 21, 22, 24, 40, 46, 50 | N, R, Z, Z+, subset, equal sets, power set, subset, Cartesian product, cardinality |
| 2.2 | 1, 2, 14, 15(Venn), 26(Venn), 32 | disjoint, union, intersection, complement |
| 2.3 | 2, 8, 10, 12, 14, 20, 60 | function, domain, codomain, range, image, pre-image, one-to-one, onto, |
| | | one-to-one correspondence, composition, floor, ceiling, inverse |
| 3.2 | 2,8,14 | |
| 3.3 | | P. NP |
| | | |
| 4.1 | 26bd,28cd,32,34ab,43 | |
| 4.2 | 2,4,6,21(sum), 22(sum) | |
| 4.4 | 2,4,6 | multiplicative inverse |
| | | |
| 5.1 | 4, 22 | |
| 5.3 | 2,6,8,12,20,37 | |
| 8.1 | 2,4,6,8,19,30 | |
| | | |
| 6.1 | 7-9, 10-14, 24, 28, 36, 37,40,41,54,64,66 | |
| 7.1 | 6 through 20 | |