MTH 301
Exam 1 Review
Spring 2020

Table 2.3.1 will not be given. You are expected to be able to recognize valid argument forms, but not by name.

Memorize the definitions of *even* (p 162), *odd* (p 162), *rational* (p 183), *irrational* (p 183), and $d \mid n$ (p 190). (You won't be asked to give definitions, but these must be known to be able to write proofs.)

§2.1 #13, 23, 25, 27
§2.2 #5, 20(a,d,f), 22(a,d,f), 23(a,d,f), 40, 42
§2.3 #8, 24, 26, 27 (for 24, 26, 27, just state valid or invalid)
§2.4 #3, 7, 11, 20

§3.1 #13, 14, 19, 27 all parts
§3.2 #3(a,c), 9, 16, 18, 20, 26, 28
§3.3 #10(a,b,c,d), 14(b), 15(b), 46(a), 48(a), 51(a)
§3.4 #7, 9, 13, 21, 23, 25 (for §3.4 just state valid or invalid)
Lewis Carroll problems #1, 11

§4.1 #12, 25, 30
§4.2 #1, 4, 6
§4.3 #12, 15
§4.4 #15, 24
§4.5 #29(a)
§4.7 #1, 25(a), 26 (for 26, prove by contraposition)
Algorithm Example Question handout (flowchart also would be given)