CS 2233 Discrete Mathematical Structures – Fall 09

9/9/09

2. Homework
Due **9/16/09** before class

Please refer to the corresponding exercise sections in the textbook (Rosen, 6th edition).

Half the credit for all proofs on this homework assignment will be for the correct **structure** and the **good documentation** of the proofs. So, please make sure that you specify what type of proof you use, what claim you are proving (what logical formula does it correspond to?), and document every step in your proof (why can you infer something from what you wrote before? Why is it true?).

1.3 (page 46)

- (2 points) 28 c,e
- (1 point) 32 b

1.4 (page 58)

- (2 points) 10 a,b
- (1 point) 20 b
- (1 point) 30c

1.6 (page 85)

(a) (2 points) 6

(b) (2 points) Prove 16 using an indirect proof (i.e., a proof by contrapositive)

(c) (2 points) Prove 16 using a proof by contradiction

(d) (3 points) 28

(e) (3 points) 32