

Math 431, Assignment #1

(due 2/1/01)

On this assignment (and on all subsequent assignments), please be sure to indicate how many hours you spent on the assignment. Also please indicate whom you worked with. (Neither of these will affect your grade in any way.)

1. Problem 1.12.
2. Problem 1.14. (In a poker hand, order doesn't matter.)
3. Problem 1.22. (HINT: Think of a path as being determined by decisions: when to go rightward and when to go upward.)
4. Problem 1.28.
5. In how many ways can I divide 10 students into 2 teams of 5 each? Into 5 teams of 2 each? Note that in both cases, the order of the teams does not matter, nor does the order of the students who are on a team. (HINT: You might find it helpful to consider the situation in which the order of the teams does matter, and/or the order of the students who are on a team does matter, and then divide by a suitable symmetry-factor.)

ALSO: Each of the preceding five problems is worth 20 points. At the end of the problem set, include an estimate of your total score. You can get up to five extra bonus points if your estimate is close enough. (Note: Scores over 100 will be rounded down to 100.)