

CALCULUS, Math 17C
Homework 6 Due May 29

1. Read sections 12.1, 12.2, 12.3
2. Solve exercise 12.1: 6, 10, 14, 18, 22, 26, 28, 30, 38, 40, 42, 48
3. Solve exercise 12.2: 2, 4, 18, 20, 24, 28, 30, 34, 38, 40, 44, 50
4. Solve exercise 12.3: 2, 6, 8, 12, 14.
5. Suppose there are n boys and m girls in school. In how many ways can you arrange the children in a line while leaving the girls together (no boy can be in between a pair of girls)?
6. How many five-digit telephone numbers have a digit that occurs more than once?
7. Manhattan NY has a grid-like street structure. If we take a seven by seven block of streets, how many different ways are there to walk from one corner to the diagonally opposite corner? Say from southeast street corner to northwest street corner. Moves are only “up” (north-south) or “right” (west-east).